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ABSTRACT

The ultimate objective of the New Office and Business Education Learnings System (NOBELS) is an office occupations curriculum congruent with the concepts in the organic curriculum theory. The final report of this phase of research has developed an inventory of 375 educational specifications in behavior terms that represent basic tasks performed by 16-24 year old office workers. Based on empiric data collected by interview from 1,232 office employees and their supervisors from four areas of the United States, the educational specifications were drawn from 4,548 basic tasks and 32,447 steps of task performance. Pointed toward the classroom practitioner and learner in public secondary and community college education, the inventory of goals will affect instruction for office preparation through media developers, state and local supervisors, curriculum committees, teacher educators in business and office education, and certain innovative schools. Additional outputs of NOBELS include (1) a Taxonomy of Office Activities (ED 021 140), (2) two correlative studies on Interaction Critical Incidents and Hardware Used in Office Task Performance, (3) a Talent Inventory, and (4) the NOBELS Verbs and Synonyms. The feasibility study for NOBELS is available as ED 023 894. (JS)

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FINAL PROJECT REPORT

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DEVELOPMENT OF PERFORMANCE GOALS FOR A NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM
(NOBELS)

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SUMMARY

The primary purpose of New Office and Business Education Learnings System (NOBELS) was the development of an inventory of 375 educational specifications in behavioral terms that represent basic tasks performed by 16-24 year old office workers. Based on empiric data collected by interview from 1232 office employees and their supervisors from four areas of the United States, the educational specifications were drawn from 4548 basic tasks and 32,447 steps of task performance. Analyses of data are presented as they describe the sample cases and as they suggest clues for office education curriculum renewal.

Pointed toward the classroom practitioner and learner in public secondary and community college education, the inventory of goals will affect instruction for office preparation through media developers; state and local supervisors, curriculum committees, and teacher educators in business and office education; and certain innovative schools such as ES '70. This report of educational goals is the first of a continuing series of systematic projects planned to develop and classroom test new learnings programs in office occupations preparation.

A consortium of five institutions with contracts through the Center for Research and Leadership Development in Vocational and Technical Education comprise the working groups. The Board of Governors for Research and Development of Delta Pi Epsilon served as liaison between the consortium and the profession.

In addition to area data reports, correlative studies of a Taxonomy of Office Activities, the emergent office, interaction critical incidents and office hardware, and a Talent Inventory are also outputs of the current phase of NOBELS.

Chapter I

BACKGROUND INFORMATION

A. TOTAL PROBLEM OF CURRICULUM RENEWAL FOR OFFICE EDUCATION

New Office and Business Education Learnings System (NOBELS) is a long-range curriculum renewal project in which the current report is of the first phase. Utilizing a system model, NOBELS' overall function is to assess and modify learning programs in which purposes are preparation for office jobs. The bases of modification of office learnings programs are educational specifications or behavioral goals in which successful attainment by students are prerequisite to office employment.

As an analog model, NOBELSystem is conceived as a closed, self-correcting, and thus developing system of curriculum renewal. While the first step in its development is reported as it affects the area of office work preparation, the model is equally applicable to all areas of occupational education.

1. Purpose of the Current Phase of NOBELS

The purpose of the project reported herein was the development of educational specifications to be used as guides in the modification of behavior of learners necessary for office employment. The focus of each specification was behavior needed for office employment.

A principal criterion for developing specifications for office education has been that they be relevant to tasks as performed in current and emerging office jobs.

2. Process and Product of the Current Phase of NOBELS

A systematic inventory of office tasks as performed in current and emerging occupations has been the base for deriving the set of educational specifications reported. The office task data were collected by personal interview from 1253 office workers and their supervisors yielding 1232 usable cases. Basic tasks performed by these workers, 4548 in number, were identified, classified, and analyzed. The further analysis of tasks yielded 32,447 classified verbs that represent steps in task performance. The steps of task performance were classified according to a 108-verb listing developed for NOBELS. The basic task data were reduced to 375 performance goals that are the major output of this report.

The foregoing data are reported in Chapter III of the current volume. The resulting educational performance goals are detailed in Chapter IV.

3. Next Phases of NOBELS

The next phases of NOBELS curriculum development are: (a) the selection from the inventory of educational performance goals those that are relevant to the preparation of students in secondary or community college level institutions; (b) the preparation of learning experiences for target students; (c) the application of the learnings in a classroom; (d) the systematic assessment of the learning results; and (e) the modification of the specifications or their application based on the assessment.

Thus, NOBELS is viewed as a long-range curriculum development program in which the current inventory of educational performance goals is prerequisite.

4. Definition of Terms

"Office and business education learnings" of NOBELS means those organized learnings that are prerequisite to obtaining and holding an office job. The selection of the word "learnings" was a deliberate one, emphasizing the primacy of the individual learner in the system.

The term "system" in NOBELS can be characterized by the requirement of a terminal goal specification expected in such a form that actual attainment can be compared with expected attainment. This comparison admits to analysis and synthesis through feedback circuitry providing a closed loop, self-correcting system.

"Terminal goal specification" as used is synonomous with the terms "performance goal" or "behavioral goal" expected at the end of an educational experience. Expressed explicitly in operational terms, the specification identifies the learner for whom the goal is intended, the behavior to be learned, the conditions or alternatives of performance, and the base for assessment (criterion of success) of actual behavior achieved (Mager, 1961).

By "office occupations" is meant those clusters of occupations defined under U. S. Office of Education (1969) classifications as 14.00 00. The clusters consist of the following major groupings: 01 00, Accounting and Computing Occupations; 02 00, Business Data Processing Systems Occupations; 03 00, Filing, Office Machines and General Office Clerical Occupations; 04 00, Information Communication Occupations; 05 00, Materials Support Occupations, Transportation, Storing, and Recording; 06 00, Personnel, Training, and Related Occupations; 07 00, Stenographic, Secretarial, and Related Occupations; 08 00, Supervisory and Administrative Management Occupations; 09 00, Typing and Related Occupations; and 10 00, Miscellaneous Office Occupations.

The term "basic task" refers to those major performances of an office worker designated by a supervisor or an employee as the central purpose of the job. Our definition of task approaches that of the term "operations" used by some job analysts. "Tasks" requested to be identified by supervisors were "the most difficult, the most time consuming, and tasks requiring the most responsibility on the part of the worker."

B. THE NEED FOR NOBELS

1. The Market for Office Job Preparation

Changing numbers and kinds of clerical and kindred workers needed annually as replacements help determine the market for office job preparation. The annual replacement rate for this kind of worker is 3.5 to 4.5 percent compared with a rate of 3 percent for all workers (U. S. Bureau of Labor Statistics, 1969b, p. 50).

From approximately 10-million clerical and kindred workers in 1960 reported in the labor force, 15-million clerical and kindred workers are projected for 1975 (Table 1). Furthermore, the ratio of clerical and kindred workers to the total labor force is projected to increase by 2 percent in the same period, from 14.7 percent to 16.7 percent. By major industry groupings, most of the 15-year projected increase of 5-million clerical and kindred workers are in government (an increase of 1.9 million); wholesale and retail trade (1.2 million); services (1 million); finance, insurance, and real estate (.4 million); and manufacturing (.3 million).

One-third of an estimated total of 29-million females employed in 1968 were in clerical and kindred occupations. This estimate compares with a ratio of one to fourteen of all employed males (49-million in number) that were so employed (U. S. Bureau of Labor Statistics, 1969a, p. 33).

Furthermore, the increased absorption of nonwhite females in clerical and kindred occupations should be noted. For example, in the year of 1959, 7.5 percent of employed nonwhite females were in clerical and kindred occupations; in 1968, an estimated increase of 244 percent representing 18.3 percent of all employed nonwhite females were in these occupations (U. S. Bureau of Labor Statistics, 1969a, p. 55).

As thus characterized, the market for office job preparation is an increasing market influenced by higher than average replacement and estimated increase in numbers and proportion of the total labor force. The market for office job preparation is influenced by a high proportion of females so employed. The changing market for office job preparation is influenced by projected increases of office workers in government; wholesale and retail trade; services; finance, insurance, and real estate; and manufacturing kinds of businesses. The changing market for office job preparation is a promising one for nonwhite females as the increased absorption of this group in clerical jobs is noted.

2. Current Educational Programs in Office Education

In most comprehensive secondary schools, approximately one-third of all students enroll in one or more office and business education courses. In one recent study of entry occupations, 44 percent of all graduating seniors who sought employment entered office jobs (Cook and Lanham, 1966).

Curriculum for office education in the typical high school has been characterized as an aggregate of courses rather than integrated programs of learning (Lanham and Trytten, 1966, pp. 23, 26, 27). Traditional courses in

TABLE 1

Percent of Clerical and Kindred Workers of Total of All Workers in Selected Industry Groupings (1960 and Projected 1975) from Bureau of Labor Statistics*

	All Industries		Agriculture		Manufacturing		Utilities		Whsale Retail		Fin. Real	Ins. Est.	Services		Government	
	1960	1975	1960	1975	1960	1975	1960	1975	1960	1975	1960	1975	1960	1975	1960	1975
Clerical & Kindred Workers	14.7	16.7	.6	1.0	12.4	12.0	24.2	24.0	14.0	17.1	45.2	44.0	11.8	14.6	42.7	38.5
Stenographers, Typists, Secretaries	3.6	4.4	.2	.3	3.1	3.4	2.9	3.2	2.0	2.3	13.0	13.1	4.9	6.0	8.4	8.6
Office Machine Operators	.6	.8	.01	.01	.8	.5	.8	1.1	.8	1.0	2.8	3.9	.2	.3	1.1	1.2
Other Clerical & Kindred	10.5	11.5	.4	.7	7.9	8.7	20.6	19.6	11.2	13.9	29.7	27.0	6.7	8.3	33.3	28.7
Accounting Clerks	.6	.5	.02	.04	.4	.5	1.0	.8	.8	.8	1.5	1.0	.3	.3	1.2	1.1
Bookkeeping, Hand	1.0	1.0	.1	.01	.5	.4	.4	.3	2.0	2.1	4.9	4.4	.7	.7	.0	.0
Bank Tellers	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	4.5	6.6	.0	.0	.0	.0
Cashiers	.7	1.1	.01	.0	.05	.04	.6	.8	2.6	4.2	1.1	1.3	.4	.4	.2	.2
Mail Carriers	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.4	5.6
Postal Clerks	.4	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7.5	6.6
Ship. & Rec. Clerks	.5	.4	.01	.0	1.1	1.1	.2	.2	.7	.6	.04	.05	1.0	1.0	.1	.1
Telephone Operators	.5	.5	.0	.0	.2	.1	5.1	4.7	.2	.2	.5	.5	.3	.4	.3	.3
Clerical & Kindred, NEC	6.4	6.9	.2	.6	5.8	6.5	13.3	12.8	4.9	6.0	17.1	13.2	5.0	6.6	17.6	14.8
All Workers (in millions)	66.7	88.7	5.8	3.9	16.8	19.7	4.0	4.6	11.4	16.1	2.7	3.7	7.4	12.9	8.4	14.2
Est. Number Clerical & Kindred to Total Worker (Ratio x all workers in millions)	9.8	14.8	.03	.04	2.1	2.4	1.0	1.1	1.6	2.8	1.2	1.6	.9	1.9	3.6	5.5
Increase (+) Decrease (-) in Millions (1975-1960)		+5.0		+.01		+ .3		+ .1		+1.2		+ .4		+1.0		+1.9

*U. S. Bureau of Labor Statistics, 1969b, pp. 19, 39.

this area have been developed, influenced primarily by textbooks in which the authors assume needs of students in terms of office skills and personal traits. The virtue of this traditional approach was that it allowed increments to curriculum; the weakness was that the increments seldom represented fundamental change based on job expected performance.

Even office and business education programs developed under Federal vocational education legislation and its enabling state acts since 1963 point toward an aggregate of courses rather than learning programs. For example, from examination of 36 state plans for business and office education, Haines and Coleman (1966, pp. 121-122) concluded that "the most significant fact found here is that almost every office course can be deemed as vocational in almost half or more of the states with the exception of general business courses." This trend may now be reversed as a result of the 1968 Amendments to the Vocational Education Act of 1963.

C. RELATED RESEARCH

The direction for NOBELS has been influenced more from research and development in other disciplines than from research within office and business education.

The NOBELSystem approach to curriculum renewal was a direct outgrowth of work reported from the armed forces (Christal, 1969) other branches of the Federal government, and curriculum course development reported from armed forces academies (U. S. Naval Academy, 1967).

More directly influential toward a systems base was the work of interdisciplinary consultants retained during the feasibility study. Each consultant possessed unique experiences in systems research and development.

Wilson, director of the Industrial Systems and Research Institute, warned against difficulties of obtaining mathematical precision in an educational system envisioned for Moonshot. Hill (and Kerber, 1967), as a mathematician and educational researcher, considered even a primitive model of curriculum system to be a step then needed to develop educational specifications. Canfield (1967) as dean of instruction had implemented a system-based curriculum at the then new Oakland County (Michigan) Community College. Rummler as director of the Center for Programmed Instruction for Business followed an "operations research" model in analyzing and modifying in-service training programs in business organizations. Morrison (American Institutes for Research, USOE No. 5-0009), then located at the American Institutes for Research, was principal investigator in an occupationsl curriculum project at Quincy, Massachusetts. Morrison's work preceded but also led into the present Educational Systems for the '70's (ES '70 News, 1968), a network of pilot schools committed to developing a system approach to education following the constructs of behaviorists.

Among behaviorists, the writings of Gagné (1965), Mager (1961), Popham (1967), and Morgan and Bushnell (1967) each influenced direction of NOBELS toward a system approach to curriculum analysis and modification. Among educational system's writings, the work of Fine (1969) and Silvern (1965, 1967) have been influential.

The Bloom (1956), Krathwohl (1956), and Simpson (1966) taxonomies in the areas of the cognitive, affective, and psychomotor domains were studied in the pilot phases of NOBELS. Originally proposed for analysis of tasks according to cognitive, affective, or psychomotor components, we do not see even the most cognitive of office tasks which is not influenced by affective and frequently psychomotor dimensions. Perhaps Simpson (1966) best indicated the problems of analysis of educational goals when she said that there should be yet another domain, an "action pattern domain," which would go beyond but encompass the other three domains. The verb listing developed for NOBELS approaches Simpson's idea.

Tuckman's (1969, 1970b) SCOPE project is one of utilizing behaviorally-stated objectives such as those derived from NOBELS in the development of broad programs of organic learning experiences oriented toward the occupational task.

In the field of business and office education, Perkins (1968) and others had assembled empiric data from the State of Washington, concerning task performances expected of office workers. Preceding Perkins' report, McCloskey (1967) reported on Knowledge and Skills Required for Clusters or Families of Occupations. Also in the series, Perkins and Boyd (1966) developed a model for collecting their sample of office job tasks. The sample design for the State of Washington emphasizing the small business is not representative of the national office worker concentrations in metropolitan areas and in large businesses.

A teacher-made list of 599 tasks was identified by Perkins and these were classified according to the following categories: (1) typing, (2) operating office machines and equipment, (3) taking dictation and transcribing, (4) mailing, (5) filing, (6) telephoning and communicating, (7) performing clerical operations, (8) securing data, (9) using mathematics, (10) performing financial and record keeping operations, (11) performing editorial operations, (12) meeting and working with people, and (13) miscellaneous. A weakness of the Perkins' list is a lack of definition of task. Such processes as planning one's work and such noneducational but important actions as dusting and sweeping the floor were all designated as "tasks." The categories used also appeared to be biased toward present office education curriculum. For example, the classification of operating office machines was influenced, we suspect, by the current course title called "office machines." Early recognition in NOBELS of the weakness of definition and classification did help avoid at least these biases toward current office education curriculum.

Crawford (1969) has developed lists of competencies necessary for employment in distribution jobs. Unlike the Perkins' and NOBELS' projects, lists of competencies were derived from expert opinion rather than more direct data sources such as the worker or his supervisor on the job. Both studies were unique in attempting to identify competencies expected of entry workers as a base for curriculum modification.

That the Crawford and Perkins projects sought relevance for job preparation from current jobs, like the current phase of NOBELS, is commendable. A more substantive problem is transferring the base data, such as obtained by Crawford or Perkins, to learning programs that do, in fact, shape behaviors of learners to match the required competencies.

Among the first U. S. Office of Education Research Branch funded projects in distributive and office education was Opportunities and Requirements for Initial Employment of School Leavers (OREOS). As an interview survey project, representative samples were drawn from Detroit businesses and the public high school graduating class of 1963. From data thus collected, Cook and Lanham (1966) concluded that small companies are not a major source of entry jobs for office and retail workers; the majority of businesses surveyed did not have jobs for inexperienced youth between the ages of 16 and 21. Further, they reported that business jobs demand few if any skills other than typewriting for initial employment.

As a direct outgrowth of the latter finding, senior intensified programs (SIP) were developed and implemented (Lanham and Cook, 1970). As curriculums for students with little if any previous business preparation, separate one-year programs were tested in data processing, distribution, stenography, and clerk-typist job clusters. In SIP, students were placed in a part-time, paid work experience as soon as they could be employed, usually not later than the beginning of the second semester. A follow-up study of SIP students (Brown, 1969) showed that these students as a group did secure jobs equal in number to other business-trained students in school and were rated as highly by employers as traditionally trained business education students, or at least significant differences could not be identified. The in-school time necessary to gain employment in SIP was less than half that of traditional programs.

The block-time approach, which utilized a two- or three-hour period of time to teach the office subjects, also involved a flexible scheduling of learning activities. The objective of the block-time approach was to integrate the learning experiences of the student in a simulated office setting. Four states and Michigan participated in one study (McBeth, 1967)--Arizona, Florida, New Jersey, and Washington. A complete evaluation of the results of this project have yet to be analyzed in terms of curricular implications for the learner.

D. NOBELS ORGANIZATIONAL STRUCTURE

The formation of Delta Pi Epsilon's Board of Governors for Research and Development is described elsewhere (Lanham, 1968). This Board served as a link between business and distributive education profession and the Center for Research and Leadership Development in Vocational and Technical Education at the Ohio State University, the prime contractor of NOBELS. As provided in the proposal, the officers of the Board of Governors served on the Center's Executive Committee for NOBELS. Funding from U. S. Office of Education, Research Branch, was through contract with the Center.

The project director operated under contract with the Center through Wayne State University. Area data collection contracts were located at the University of California at Los Angeles, the University of Georgia at Athens, the State University of New York at Albany, and the University of Minnesota at Minneapolis.

E. OBJECTIVES OF THE CURRENT STUDY

To derive the major product of the current phase of NOBELS the following objectives were identified:

1. Determining a framework for analyzing current and emerging office tasks
2. Isolating trends and concepts from emerging office occupations and practices and converting these to performance goals
3. Developing a sampling design for collecting data from office work stations
4. Developing a procedure and a training program for data collection
5. Converting field data to performance goals: primary (terminal), interim, and prevocational
6. Analyzing the data collected
7. Reporting a master list of performance goals

F. PRODUCTS DERIVED FROM MEETING OBJECTIVES

In response to Objective 1, Huffman and Brady (1968) developed and previously reported the Taxonomy of Office Activities. NOBELS Action Verbs and Synonyms, a list of verbs derived from steps of office tasks as currently collected, and included in this report, is a direct outgrowth of the Taxonomy.

The report of trends and concepts from emerging offices (Objective 2) is not currently available. Under the direction of Huffman, his tentative findings are reported here for the first time (Appendix A).

The present report is primarily the product of meeting Objectives 3-7. Final area data reports are available from the following NOBELS participating institutions: State University of New York at Albany, H. Tonne, area director (1969); University of California at Los Angeles, L. W. Erickson, area director (1969); University of Georgia, C. Calhoun, area director (1970); and University of Minnesota, R. Price, area director (1970).

Two correlative NOBELS studies are included in the University of Georgia report: "Interaction Critical Incidents" and "Hardware Used in Office Task Performance" (Calhoun, 1970).

The Talent Inventory, an integral part of the feasibility study and of the current phase of NOBELS, has also been reported by Cook et al., (1970).

All supporting reports as listed are being made available through Education Research Information Centers' Educational Document Reproduction Service, 4936 Fairmont Avenue, Bethesda, Maryland 20014.

Chapter II

THE PROCESS OF DEVELOPING PERFORMANCE GOALS

A. A SYSTEMS OVERVIEW OF NOBEL PROCESS

The model for a system approach to curriculum renewal was described at length in the final report of the feasibility study (Lanham, 1968). At least two purposes cause us to review at this point the analog NOBELSystem model (Chart 1).

The first purpose is to re-orient the reader to the current phase of NOBELS' curriculum development in terms of the overall system approach. The current phase of the project, it will be remembered, relates to the second rectangle of the flow-process model labeled "performance goals." All methods and procedures described here should be evaluated in terms of their yield of operational objectives.

The second purpose is to illustrate further the application of a process system model such as NOBELS. While the schematic was developed primarily as a model to implement total curriculum renewal, its controls have proved equally applicable to the current phase of the process of developing a set of performance goals.

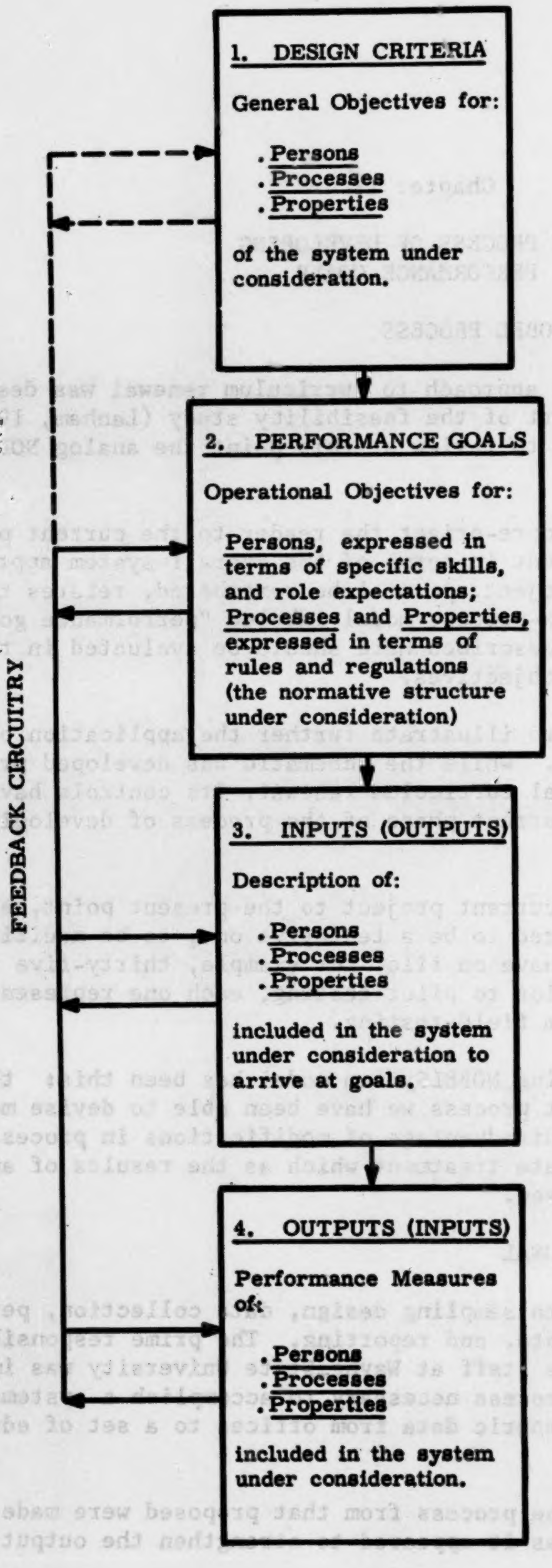
From the start of the current project to the present point, each step of process has been considered to be a tentative one, to be modified as warranted by feedback. We have on file, for example, thirty-five different interview protocols made prior to pilot testing, each one representing modifications resulting from field testing.

The advantage of applying NOBELSystem model has been this: the current output represents the latest process we have been able to devise modified as experience warranted. The disadvantage of modifications in process has been at times an unevenness of data treatment which as the results of analysis are reported will be disclosed.

B. MODIFICATIONS FROM PROPOSAL

Objectives 3-7 relate to sampling design, data collection, performance goal writing, analysis of data, and reporting. The prime responsibility of the project director and his staff at Wayne State University was implementing these objectives, i.e., a process necessary to accomplish a systematic collection and conversion of empiric data from offices to a set of educational performance objectives.

Two modifications of the process from that proposed were made. Each modification was made only as it appeared to strengthen the output. Neither


1. DESIGN CRITERIA
General Objectives for:
. Persons
. Processes
. Properties
of the system under consideration.
2. PERFORMANCE GOALS
Operational Objectives for:
Persons, expressed in terms of specific skills, and role expectations;
Processes and Properties, expressed in terms of rules and regulations (the normative structure under consideration)
3. INPUTS (OUTPUTS)
Description of:
. Persons
. Processes
. Properties
included in the system under consideration to arrive at goals.
4. OUTPUTS (INPUTS)
Performance Measures of:
. Persons
. Processes
. Properties
included in the system under consideration.
FEEDBACK CIRCUITRY

ANALOG SYSTEM MODEL

FOR NOBEL

modification changed in any significant way the scope of work to be performed. The two modifications were: (1) change of data collection centers from nine to four and (2) change in form and format of performance goals to be produced from those of proposal specifications.

1. Change in Number of Data Collection Centers

In a judgmental sampling design, the following had been originally proposed for data collection:

> Nine regional subcontracts will be arranged with major universities for regional data collection according to the nine regional subdivisions used for classifying and reporting U. S. Census data. (Lanham, 1967, p. 28).

The unwieldiness of training nine teams of data collectors, indeed, just insuring some uniformity of data collection, checking, and forwarding to a central location were noted early. To meet these anticipated difficulties within the limitation of resources, the decision was made to decrease the nine regions to four area centers representing four subdivisions used for classifying and reporting U. S. Census data. As stated in the proposal, our opinion continues to be:

> We do not believe that geography will be a factor producing significant differences in performance goals developed from among the nine regions . . . . Even though differences in performance goals as between or among regions are found, data collected will not necessarily be irrelevant because of (a) The increasing mobility of the work force that necessitates a blending of preparation for employment over a wide geographic area, (b) The increasing concentration toward urban living (as recognized in our sample design) (*Ibid.*)

The change did have in our opinion the following benefits in improving the results reported here: (a) training dollar per interview case was decreased, (b) travel costs of data collection directors and/or central staff to meet were decreased, (c) area overhead costs were decreased over that proposed, and (d) central control problems of obtaining area output were within the resources available.

2. Change in Form and Format of Performance Goals

Originally proposed were specifications for three levels of performance goals: primary (terminal), interim, and prevocational. Primary goals were defined as:

> A primary (terminal) performance goal is difficult to define in any absolute sense; however, it specifies a behavior critical to successful entrance and adaptation to an office job. As the behavior expected at the end of a business and office educational program . . . , primary goals are abstracted directly from tasks performed in an office. (*Ibid.*, p. 12)

Interim goals were defined in the proposal as:

> . . . significant achievement points leading to the attainment of primary goals. To develop interim goals, primary goals will have to be analyzed in terms of their prerequisites and difficulty. An ordering of difficulty of primary goals will provide some guidance to later sequencing of learning activities. In other words, some less difficult primary goals may become interim goals for more difficult-to-achieve primary goals. For example, "sorts toll tickets by customer account number," an easy-to-achieve performance, may be but one important activity leading to a more difficult posting performance goal. Such activities as sorting may thus form a set in which various dimensions of sorting, classifying, comparing, collating, matching, or sequencing form the base for determining interim goals necessary for the later achievement of a more difficult primary goal of posting as well as other primary goals (Ibid., p. 13).

Prevocational goals were defined in the proposal with the following three operational definitions:

> (a) A foundation skill or role behavior necessary, in the broadest sense, for successful participation in work. For example, the galaxy of common data and information business forms (purchase orders, sales invoices, money and credit devices, and the like) may require performance related to input; handling or processing; and storage, retrieval or output of data and information as prerequisite to most office learnings.
>
> (b) An occupational task which, because of its expected high motivational value, can be used as the vehicle for more general learnings. For example, we view the tasks of a reservation clerk in an airline or travel agency as providing potentially exciting tasks to be learned by some students. These tasks can be used as a vehicle to develop oral and written communication, computation, and social roles as they relate to customers and associates. These tasks may also contribute economic behaviors related to transportation as an industry and an individual's potential role therein.
>
> (c) Because of the wide range of individual differences among learners in educational institutions, from disadvantaged to talented, the business and office task provides levels of difficulty in which learnings can be geared to differing individual needs and abilities to learn. For example, the pragmatic appeal of the business transaction developed at appropriate levels of reading comprehension could provide a prevocational goal direction for literacy training of some disadvantaged youth and adults (Ibid., p. 13).

The reported goals contained herein approach the definition of primary goals that have been analyzed into components or steps of performance. To the extent that steps or a sequence of steps of a task require learning, the analyzed steps approach our definition of interim goals. Claims are not made, however, that the steps of performance or combinations thereof represent identifiable "interim" or "prevocational" goals as purported to be extracted from terminal behavior expected of workers embarking on an office job. The reasons for disclaiming the oversimplification of prescription have developed during the course of the investigation:

(a) NOBELSystem model assumes a knowledge of the characteristics of learners both in terms of his needs upon entrance into and through a preparation-for-office-job program, an assumption which demands further testing. What we know about individual differences of students, for example, does not admit to generalization of the prevocational competencies a ghetto youth, say, possesses upon entrance into an office preparation program, let alone the wide range of competencies that different students who can be characterized as "ghetto youth" may bring.

(b) The increased consciousness of business to community socio-economic-political responsibility is changing the expectations of employee performance. This increased business responsiveness to community need has been noted throughout the current phase of NOBELS and we predict must and will increase in the immediate future.

(c) Learning theory as pointed out by Bruner (1968) is not necessarily a guide to instructional strategy and in this instance strategy needed to bring about job competency. Many strategies for instruction based on the current output of NOBELS must be formulated and tested prior to determining interim or prevocational specifications.

For the reasons stated, empiric data collected in the current phase of NOBELS cause us not to assume that tasks of job performance are necessarily equal to what a learner needs to learn or the strategy of instruction needed for learning.

C. CHRONOLOGY OF PROCESS

Completion dates of major events help to define four time periods in the current process of NOBELS: 1. planning and instrumentation, 2. pilot testing, 3. principal data collection, and 4. analysis and reporting results.

1. Planning and Instrumentation (July 1, 1968 to January 1, 1969)

Planning involved rescheduling of some proposed events to correspond to contractual differences in funding extended over two fiscal periods rather than one period proposed. The rescheduling involved changing to four areas for data collection, inserting and planning a pilot data collection and testing period in two geographic areas, and preparing a training program for data collection.

a. Sampling Design

Through the feasibility study, a judgmental sampling design had been determined incorporating factors of data collection to yield office task data in proportion to demographic location of office workers as found in available U. S. Bureau of the Census Current Population Reports (1966) and the Census of Population (1960).

The factors thus considered were stated in the proposal as follows:

> a. Data will be collected from office work stations filled by 16- through 24-year olds who have less than a baccalaureate degree. This guideline will insure data appropriate to the population of students most likely to profit from business and office education preparation: dropouts, high school graduates, and community college graduates. Studying workers with a minimum of eight years of experience, the guideline leads to data from a hierarchy of office jobs: those requiring a minimum of skill and role performance through these requiring a technical or even supervisory level of performance.
>
> It could be argued that rather than office jobs held according to age, certain dictionary of occupational titles (DOT's) in office clusters should form the base for data collection. However, 1960 census data indicate that clerical and kindred workers, not elsewhere classified (NEC), represent approximately one-third of all office workers (3,016,387/9,617,487) and the NEC group is twice as large as the next highest classification of secretaries (3,016,387/1,492,964).
>
> Such a condition suggests an amorphous grouping of job tasks in many office areas. It is our hunch from what is currently known about office jobs that overlapping of tasks exists among clusters of office DOT's (perhaps as high as three-fourths to four-fifths). In consequence, examining tasks of jobs actually held by 16- to 24-year olds appears to be more desirable than selecting clusters of DOT's.
>
> b. Job stations held by male workers versus female will be examined in a ratio of approximately one to two. This ratio approximates that found to exist in clerical and kindred occupations in 1960.
>
> c. Approximately two-thirds of the job stations examined will be from service; public administration; finance, insurance, and real estate; and manufacturing types of businesses. These areas of the standard industrial classification provide approximately two-thirds of all office occupations. Public administration and finance, insurance, and real estate represent those SIC's in which an increase in the number of workers is expected.
>
> d. Approximately seven-ninths of all field data will be collected from standard metropolitan statistical areas of 100,000 or more population as this ratio corresponds to the proportion of all office workers employed in these areas to the total office employed, and the further urbanization of our population is a distinct trend. Four-fifths of the data will be collected from firms employing 100 or more workers for the same reason (Lanham, 1967, p. 29).

Item 2, the ratio of male to female cases, was later modified at the end of the pilot data to one male for every four or five females. We think now the one to two ratio as proposed was inserted as a typographical error. Certainly the census data more nearly approximates the one to four ratio. Census data also included a large number of federal government postal clerks, substantially a male population. Since the cases finally collected include only one government male postal clerk in the total sample, the decision to change to a ratio of one male to four or five females appears to be warranted. The number of cases to meet the judgmental sampling design was proposed to be from 1000 to 1200 work stations. Actually, in pilot and principal data collection 1253 cases were received with 1232 usable cases forming the base of data on which performance goals were drawn and herein reported.

To rationalize the judgmental sample, our defense is the absence of resources to draw a more sophisticated sample that would be representative of the national population of office workers. The degree of error from uncontrolled variables of data collection contained herein would not, of course, be lessened by the most sophisticated of statistical sample design.

b. Instrumentation

Graduate students of the project director had tested a variety of office tasks data collection procedures throughout the feasibility study. As a result, an interview process was derived for the current phase of NOBELS data collection. The process as stated in the proposal, was described in terms of data to be collected from one work station as follows:

> a. Selecting and soliciting company support and selecting employees for study.
> b. Collecting normative data about each company
> c. Collecting normative data about employees studied
> d. Obtaining (with supervisory help) support of employees through indicating purposes and assuring anonymity and an absence of any evaluative data to supervision
> e. Distributing job task forms and illustrating (if possible in groups) completion of one day's listing of job tasks performed. Each task will be listed according to source, what was done, when the task was completed, and, as possible, contingencies or variable decision points.
> f. Collecting of job task sheets, possibly work samples, and interviewing the employee to complete activities within tasks
> g. Interviewing a supervisor for normative role information, collection of employee handbooks, directives, and the like (Ibid., p. 30).

To satisfy the foregoing, instruments developed contain the following:

a. Institutional normative data such as location, size of company, SIC, and number of employees
b. Office employee normative data such as age, sex, highest year of education completed, DOT and/or company job classification
c. Form to collect employee task information
d. Employee and supervisor interview protocols
e. Training program content needed for collecting data and writing performance goals.

From the beginning of the funded project, about July 1, 1968, approximately eighty graduate students tested thirty-five variations of interview protocols, each modification of which was made to yield more nearly a maximum of task data within constraints of cost effectiveness.

Fundamental to eliciting the basic tasks performed by a worker in this formative stage was a one-day diary completed by the worker. Such a diary did provide concrete statements of tasks performed which were then analyzed. After the pilot data collection period, however, the task diary was eliminated and basic tasks performed were identified by supervisors and employees. The change, though causing a loss of some nuances of overall job performances, did cut data collection time per interview to equal available funds.

With the exception of the above change, data yielded from the two versions are comparable. The final form (Appendix B) provided information to serve the purposes listed in Chart 2.

Chart 2

Summary of Interview Protocol by Page, Source, and Purpose of Information

Page of Interview Protocol	Information Received from	Purpose of Information Collected
1	Supervisor	Data about company such as SIC, size, SMSA
2	Supervisor	Basic tasks performed by employee with weightings of factors of importance
3	Supervisor	Two task-related and two interaction (social role) critical incidents as observed in subject employee and described
4	Employee	Normative data such as age, sex, job classification, education completed
5	Employee	Same as page 2 except completed by employee
6	Employee	Each basic task identified on pages 2 or 5 was analyzed on a separate page 6 according to steps of performance, alternatives, and criteria of successful completion

c. Social Role Behaviors

In the proposal of NOBELS, a commitment was made to define behaviorally the characteristics, attitudes, and traits of workers in terms of the social context of office work. As proposed, four basic steps were involved:

(1) A decision must be made as to what social roles the various persons are expected to perform. Some of these roles might be that of employee, consumer, civic participant, or literate adult.

(2) These roles are then observed in life situations to determine the essential skills, attitudes, and rules which are necessary for successful performance.

(3) Wherever possible, the skills, attitudes, and rules are quantified (enumerations, scores, physical measurements, and to a limited extent, rankings).

(4) These skills, attitudes, and rules become the foundation for development of social-role performance goals of the educational program and its evaluation design (Ibid., p. 16).

To accomplish the foregoing, a critical incident technique (Flanagan, 1954) was adapted and modified in the final interview protocol in which supervisors were asked to describe four observed happenings as follows:

> "Regarding job performance of a basic task, would you cite a specific incident when this employee was particularly effective in performing this task?"
>
> "In the worker's task of (recall from task list), you mention that an error could cause (choose one with great or moderate) consequences. Would you cite an example when this employee's performance was a little less than perfect."
>
> "Since assuming this job, there must have been times when this employee did an outstanding job of working with someone else or in handling a situation with a customer or client either face to face or on the phone. Would you cite an example and tell me in what way this employee handled the situation effectively?"
>
> "Now would you give me an incident when this employee was a bit less than 100 percent effective in his contact with other business people--either in the office or with your business contacts?"

Eliciting critical incidents, especially unsuccessful or negative ones, was reported by interviewers to be a difficult task. Supervisors were frequently reluctant to report incidents that reflected unfavorably on their employees. Further, approximately one-fourth of reported behaviors were generalized such as "He's always pleasant on the telephone" rather than specific incidents such as "Last week, President X remarked how helpful he was in collecting information needed for the board meeting." This difficulty of generalized behaviors being reported probably occurred because of a weakness in training interviewers to probe further for the desired specific incident. Despite weaknesses, critical incidents collected, both task related and interaction, have been classified, and provide an output of the current report. The interaction critical incidents were analyzed by faculty at the University of Georgia under the direction of Calhoun (1970) and our reporting of social role performance goals is from their final and more complete report.

d. Training Program Development

Concurrent with the development of instruments was the development of a training program for area project directors and their interviewers. A consultant in interviewing methodology was retained to help train the central staff and develop that portion of the training program.

In cooperation with Detroit Edison Company personnel, six interviews with supervisors and their employees were videotaped as case materials to be used at a central training session.

A manual of NOBELS background information and process then developed was prepared for each interviewer to be used as content of the training session in the pilot study and later as reference.

2. Pilot Testing, January 1 to May 31, 1969

Two contracts for pilot testing were negotiated with the University of California at Los Angeles and the University of Georgia. A part of the schedule of work at the University of Georgia was in turn completed through the University of Tennessee. Completion of major events in the pilot testing were (a) February 17, 1969, training institute of pilot testing area directors and their interviewers; (b) April 20, 1969, pilot data from a minimum of seventy cases in each location completed and reported (c) May 31, 1969, review and modification of process preparatory to principal data collection.

a. Training Institute

The agenda of the training institute held in Detroit February 14-17, 1969, is appended. E. J. Morrison, research coordinator, The Center for Research and Leadership Development in Vocational and Technical Education, Mrs. Sue Smock, consultant on interviewing techniques, and Bruce Tuckman, Rutgers University, were special consultants complementing the project directors staff in conducting the institute.

Six Detroit Edison Company videotaped interviews were the raw case material used in training. The institute was completed with a live interview conducted by two interviewers with a Detroit Edison Company supervisor and an office employee.

Key people from two institutions other than pilot area institutions that were to be used in principal data collection also attended: State University of New York at Albany and University of Minnesota.

b. Pilot Data Collection

The process for data collection in each of the pilot testing areas follows:

(1) By letter or phone, a company was contacted to explain the project and to secure permission to conduct interviews.

(2) The number of interviews (not more than four in one company) and departments involved was determined and dates set for interview of supervisor.

(3) An interview with the supervisor of the employee was conducted.

(4) The employee performing in the job to be studied was then interviewed. The purpose of NOBELS was explained and participation in the project solicited. An explanation of the daily log was given, the forms left, and a future interview date set.

(5) The interviewer returned on the specified date, picked up the daily log, and coded the activities according to the following scheme of basic, secondary, special, advanced, ancillary, and changing. Task classification definitions adapted from Morrison (1967) follows:

(a) Basic. Tasks which constitute the central purpose or mission of the job. These tasks will be described in detail as to conditions, contingencies, steps, and (as possible) success criteria. These tasks must be mentioned as being most important and/or most time consuming by the employee and/or the supervisor in their respective interviews. Performance goals will be written for these tasks.

(b) Secondary. Tasks which are closely related to, but not a part of, the central purpose of the job--not mentioned as most important or most time consuming by employee or employer. These tasks will be described in detail as to conditions, contingencies, steps, and (as possible) success criteria. Performance goals will be written for these tasks.

(c) Special. Tasks that are rarely performed and/or not closely related to the central purposes of the job. These tasks will be described as to conditions and processes, but performance goals will not be written.

(d) Advanced. Tasks that require specialized training and/or job experience for their performance and which are performed by only the most senior workers. These tasks will be described as to conditions and processes, but performance goals will not be written.

(e) Ancillary. Tasks for which very little education is needed. Dusting, preparing coffee, delivering items, clipping ads, or other tasks of this nature are to be included in this category. These tasks are listed but not described.

(f) Changing. Tasks that are known by the employee or supervisor to be in the process of change because of technology or other conditions. These are tasks which will be changed so drastically that a completely new task will result from the change. These tasks are described briefly, along with the change that will occur. Performance goals will not be written for these tasks.

(6) The interviewer talked with the office employee to determine the basic and secondary task performance sequence in steps, alternatives, and criteria for acceptable performance.

(7) As viewed by the employee, the interviewer reported basic and secondary tasks in performance statement form, and through the regional director forwarded completed interviews to the project director.

(8) Letters of thank you were sent to supervisors and employees who participated.

c. Review and Modification

Throughout the pilot study, interviewers provided feedback about the process. Some of the problems were: (1) the time involved in getting to and from designated population centers; (2) the time and cost involved in two visits to each company, sometimes three due to a worker's absence or inability to keep the daily log by the specified date of the second interview; (3) difficulties encountered in capturing from supervisors critical incidents; (4) delineation of tasks and task steps from the log; (5) basic task not listed on a particular day's log; and (6) time required to write task statements (from 6 to 12 hours for a single interview).

In response to the foregoing, modifications in instruments and process resulted in "Instructions for Collecting Data and Writing Performance Goals," dated June 1969 (Appendix C). The following guides developed from pilot experiences were also agreed to be followed by all area directors in the principal data collection:

1. Because of absenteeism, have a back-up person selected at a company to be interviewed.
2. Review all cases for adequacy and revision prior to mailing to the central office.
3. Request typewritten reports to be sent to central project director.
4. Use the *Taxonomy of Office Activities for Business and Office Education* as a source to help standardize terminology.
5. Send to the central office by first-class mail 10 to 25 cases in a package at one time.
6. Select not more than one person in the same job classification within a department.
7. Select not more than seven workers from any one company.
8. Interview not more than two workers in the same job classification from any one company.
9. Urge data collectors to support interview cases with job descriptions, work samples, and forms.
10. Check data collectors' work especially to delete personal names and to insure use of action verbs in task statements and steps.
11. Limit basic tasks to not more than six activities for any one worker.
12. Indicate key steps of the sequence of activities making up the task.

3. Principal Data Collection--June 1, 1969 to October 1, 1969

Within the constraints of the project proposal and agreed upon policies and process, area directors were in complete charge of employing interviewers, scheduling interviews, monitoring completed interview forms, and forwarding completed cases to the central office at Wayne State University.

All interview protocols and training materials were supplied centrally. A research assistant from the project directors staff met in each of four areas to support the training programs in the areas.

In addition to the area monitoring, each case received centrally was checked for completeness and apparent agreement with standards. Clarification by area director was requested for cases deviating from agreed upon policy or process. In the foregoing way, all cases from each of the four areas were received in Detroit prior to October 1.

4. Analysis of Data--to March 31, 1970

Developing classification schemes, coding, and keypunching data, obtaining computer printouts of manipulated data, and preparing summaries of office tasks to develop educational performance goals represent major activities in analyzing data.

a. Developing Classification Schemes

Coding used for keypunching and its verification is described in Appendix D. Developing classification schemes for tasks, for steps of tasks, and for critical incidents each provided a set of perplexing problems that will be described.

(1) Classification of Tasks. Attempts were made to classify statements of tasks by verbs of the Taxonomy (Huffman, Brady, et al., 1968). Verbs of the Taxonomy did not provide an adequate clue to represent tasks.

Gradually developed to the time of coding and keypunching was a business functions scheme in which a manufacturing model was used to describe nine major areas of functions and a total of 99 subfunctions as follows:

Chart 3

Two-Digit Code for Classifying Tasks by
Nine Major Functional Areas

First Two-Digit Code	Functional Area
01 - 19	Accounting and Computing
20 - 29	Data Processing
30 - 39	Personnel
40 - 49	Production
50 - 59	Purchasing
60 - 69	Inventory, Shipping, and Receiving
70 - 79	Sales
80 - 89	Communication, Oral and Written
90 - 99	Other Services

In addition to function within area, tasks according to their result, reason or "why" for being performed were also coded. Added as the third and fourth digit task code was the following major classifications of "why" or results:

Chart 4

Two-Digit Code for Classifying Tasks by
Nine Results of Performance

Second Two-Digit Code	Result Classification
01 - 19	Source Documents
20 - 29	Negotiable Instruments and Investments
30 - 39	Correspondence and Mail
40 - 49	Electronic Data Processing
50 - 59	Files
60 - 79	Reports, Tabulations, and Charts
80 - 89	Inventory (Intransit, Warehouse)
90 - 99	People and Ideas

All tasks were coded then, by a four digit number with the first two digits representing a functional area or "what" and the last two digits, the "why" or object of the task performed. All such tasks thus coded were reviewed and discrepancies discussed and changed by consensus.

Some difficulties were experienced in reaching agreement on the function code: (1) the manufacturing model of functions did not accommodate client related services of government and other service type industries, e.g., hospitals and financial institutions; (2) certain service functions such as typewriting could be classified under two headings, a function such as "personnel" and "communication, oral or written" heading. By arbitrary definition such as, "All typewriting activities will be classified under "communication, oral or written" such difficulties were resolved--at least through the coding and keypunching stages for computer manipulation.

The second two-digit code, the result or "why" classification proved to be less dependable. The confusion between "what" and "why," the similarity of several "what" and "why" classifications, e.g., data processing as a function and data processing punched cards or printouts as a result as well as the multiplicity of some results that could not be defined under one category. The discrepancy rate as between coders was high, and while these discrepancies were discussed and some agreement reached for coding purposes, we do not now rely on the printed results for any major analysis of the "why" of office task performance.

(2) Classification of Steps of Tasks. A listing of 108 verbs was derived on which to code verbs of steps and alternatives of analyzed tasks. The basic list and their synonyms were developed by one person who did the first coding of all verbs. This coding was checked for consistency by one other person. As reported elsewhere, we now recommend a synonym list of 57 verbs (Lanham, Weber, 1970). This recommendation is based on examination of printouts as reported herein.

(3) Classification of Critical Incidents. Classification of 780 critical incidents collected in the pilot period yielded a classification based on the worker in relation to where the incident occurred in the system. It was not until the principal data collection period that task related and interaction incidents were attempted to be collected. These incidents were coded according to the following: Cognitive skills; Checking skills; Communication skills; Psychomotor skills; Work habits; Attitude, Affective, Within; Social skills or graces; Interpreting system; and Instructing, Creating.

The foregoing scheme was used to code critical incidents for computer printouts. We were dissatisfied with the classification, however, because many of the "task related" incidents as recorded were interaction incidents and vice versa. We were also dissatisfied with the scheme for classifying interaction incidents. For both reasons, incidents were by content physically separated according to task related and interaction and a new interaction classification scheme developed as follows:

I. Worker's Perception of His Role Expectations Within the Formal System
    A. The Internal (Closed) System
        1. Relation to Superiors
        2. Relation to Peers
        3. Relation to Subordinates

- B. The External (Open) System
  - 4. Relation to Customers or Clients
  - 5. Relation to Sales or Service Personnel
  - 6. Relation to Others (Visitors, Applicants, Donors)
- II. Worker's Perception of Relationships Apart from Role Expectations
  - A. The Internal (Closed) System
    - 7. Relation to Superiors
    - 8. Relation to Peers
    - 9. Relation to Subordinates
  - B. The External (Open) System
    - 10. Relation to Customers or Clients
    - 11. Relation to Sales or Service Personnel
    - 12. Relation to Others (Visitors, Applicants, Donors)

In addition, six descriptors were derived to classify the type of behavior exemplified by each incident. These descriptors follow:

- A. Telephone Communication (Did the incident occur on the telephone?)
- B. Information (Was information concerning job content or company policies necessary for successful interaction?)
- C. Reaction to Stress (Was the worker able to control self and handle unusual or difficult situations?)
- D. Judgment/Decision-Making (Did the worker have to make a decision or use judgment for successful interaction?)
- E. Initiative/Creativity (Did the worker use these attributes in interacting?)
- F. Social Sensitivity (Did the worker exhibit willingness to help, tact, courtesy, or social graces in dealing with others?)

In turn, the University of Georgia manipulated the newly separated interaction incidents according to the new scheme. While task related incidents were not reclassified or remanipulated after coding for computer printouts, examples of task related incidents are inserted among functional area of performance goals as presented in Chapter IV.

b. Coding, Keypunching, and Printouts

All coded data and code sheets were double checked. Keypunching and verifying were farmed out to skilled technicians. Data processing was planned and implemented in conjunction with a person familiar with the Wayne State University Computer Center and research data manipulation.

c. Preparing Summaries of Office Tasks

Data reduction caused some classification problems. Our first problem was organizing and reporting tasks as they were recorded. Books of task sheets were first organized according to the major "what" classifications previously described.

Because of this handsorting and synthesis process, we decided to modify further the "what" classification to deal with the classification difficulties previously noted, i.e., (a) the difficulty of dealing with government and other tasks of client related services and (b) the dual classification of such services as typing performed as a personnel function.

(a) Our response to the problem of client related services was twofold. First, a function of "client related services" was added that would include such tasks related to securities, insurance, education, and hotel and motel. Second, because of the difficulty experienced we contemplated the differences that the type of business makes on office task performance. To determine the difference, task sheets from two service industries, banking and medical, have been separated and office performance in each is reported separately.

(b) Dual classification of interdepartmental services were also reconsidered. The arbitrary rule followed in coding typewriting tasks, "All tasks in which typewriting is performed will be classified under typewriting in 'Communication, oral and written' biased coded data toward present office education curriculum; i.e., typewriting courses are now classified according to the tool used rather than the function served. In consequence, wherever an interdepartmental service (except data processing) could be identified with a function other than a general services function, it was so reclassified. In some typing, transcription, filing, mailing, and stenographic tasks performed in "pools" or service departments, such functional identification was not possible. In data processing our response was different. Most data processing and computer operations are performed in a service department. Further, recognition that major changes in office task performance are primarily the result of computer technology caused us to leave electronic data processing tasks as a separate set of performances whether or not they could be classified with some other function.

It is from this reclassification that summaries of tasks as generalized from our data were made and from these the 375 performance goals in the form reported in Chapter IV evolved.

D. SUMMARY

No claim is made that the report represents a final set of performance goals. Following a system model, our process has been developed, modified, and changed to report performance goals within the scope of our data. In Chapter III, normative data describing the sample, task data, steps of performance, and critical incidents are presented. Performance goals derived from the current phase of NOBELS are presented in Chapter IV followed in Chapter V by conclusions and recommendations for next steps in curriculum renewal.

Chapter III

SUMMARY OF NOBELS DATA

A. AREA DATA COLLECTION

A total of 1253 interview cases were collected as the base for preparing performance goals: 243 in the pilot and 1010 in the principal data collection period. A summary of cases collected is contained in Table 2.

TABLE 2

Summary of Interview Cases by Areas

Data Collection Institution	Pilot	Principal	Total
State University of New York at Albany		252	252
University of California at Los Angeles	75	302	377
University of Georgia	86	252	338
University of Minnesota		204	204
Wayne State University	82		82
TOTALS	243	1010	1253

Of the 1253 cases, 20 pilot and 1 principal collection period cases were not included in the final 1232 cases on which analyses were based. Pilot data are included in analyses when they were parallel to principal data collection. Graduate students in the project director's classes collected data in the pilot period but not in the principal data collection period.

Critical incidents collected in the pilot data are reported separately because the questions in the principal data collection instrument differed somewhat from those of the pilot. A listing of basic tasks and weightings as contained in final interviews were not collected in the pilot period.

Data collectors were typically certified business teachers attached to the area data collection institution as graduate students. Twelve interviewers were used in pilot data collection at the University of California and University of Georgia; 66 in the principal data collection at four participating institutions. Each team of data collectors was supervised by one or two research associates at each institution.

The following statements from area final reports characterize the quality of data collectors used.

> The University of Minnesota was very fortunate in the quality of the people if found available and were willing to participate in the NOBELS project. Each of the persons involved had several years of

business teaching experience as well as a considerable amount of office work experience (Price and Hopkins, 1970, p. 2).

The data collectors did not miss a scheduled assignment during the entire period of the project. The number of weekly interviews ranged from nine in the first week with only one data collector to sixty-three in the tenth week with eight data collectors (Erickson, p. 5).

> In theory, it would be wise to limit the interviewing to a rather small corps of workers with good background, adequate maturity, and complete understanding of the purpose, coupled with genuine professional zeal. Several such interviewers were used; however, their interest tended to flag after they had done a dozen or more interviews . . . . Therefore, a larger number of people were used (Tonne, 1969, p. 5).

In reference to Tonne's quote, 38 interviewers were used in the New York data collection compared with 9 in two areas and 11 in one other area during the principal data collection period.

Each area director was responsible for organizing and implementing data collection within his area. Typical of the planning is that of Calhoun (1970, p. 4) in Georgia for principal data collection.

> 1) A training session was held by the area project director supported by one central project director's staff. In the training session, revised forms and interview techniques were discussed and practiced.
>
> 2) Data control forms and procedures such as lists of responsibilities, itinerary, progress report forms, and sample letters to be used in contacting companies were developed and implemented.
>
> 3) Initial contact of a company was made and interviews were arranged by an area supervisor or research associate.
>
> 4) Typed interviews were received by the project director, checked, and revised to forward to the central office.

B. CASES COLLECTED COMPARED WITH JUDGMENTAL SAMPLING DESIGN

1. Age of Workers

All data proposed were to be from 16- to 24-year olds. In the pilot data collection period, above 24-year olds were agreed to be acceptable cases provided they were judged to be holding an entry job. Twelve such workers in number, or 1 percent of the total, were included in pilot cases. Strict adherence to the 16-24 year age limits was insisted upon in the principal data collection. Classification of interview cases by age is shown in Table 3.

The arithmetic mean age of the 1232 workers was 21.1 years with the modal years of 20 and 21.

TABLE 3

Interview Cases Classified
by Age of Worker

Age	Number	Percent
16	3	-
17	25	2
18	90	7
19	161	13
20	205	17
21	209	17
22	198	16
23	153	12
24+	188	15
TOTALS	1232	99

To the extent that our sample of cases represents the marketplace for office jobs, the low proportion of 18 years or younger workers indicates that office work does not seem to be a fertile market for less than the high school graduate.

The basic tasks of 1232 workers were classified according to nine functional areas of performance from 4548 detailed basic task sheets (page 6s of the interview protocol). Plotted according to age (Table 4), the mean age of performers of sales and client related services as well as communications--stenography, typewriting, and oral (M of both groups was 20.9 years) was just slightly under the mean age of all workers (M = 21.1 years).

Those tasks classified as other services, principally filing and mailing tasks, provided the lowest mean age of 20.6 years. Mean age of performers of production tasks was highest (21.8 years) followed by purchasing (M = 21.5), electronic data processing (M = 21.4), and personnel (M = 21.3).

Assuming a tendency for simpler tasks to be performed by younger workers, curriculum builders might well consider inclusion of filing and mailing task performances as (1) foundation learnings leading to more complex office task performances and (2) most probable first office task assignments for inexperiences entry workers. The assumption may not hold however. For example, because of previously inadequate secondary school curriculum for preparing students to perform data processing tasks, most training in this area has been on-the-job and would naturally be performed today by office workers with a mean age higher than beginning workers.

To avoid future misunderstanding, the functional classification of accounting and computing might well have been relabeled numerical data handling, other than electronic data processing, or clerical functions performed in an accounting department. The number of tasks collected requiring application of "principles of accounting" as taught in schools or "double entry bookkeeping" as a system of financial transaction analyses was minimal.

Following the rule that all typewriting activities were to be coded as "communication--stenography, typewriting, or oral," this area of service tasks leads all other functions, totaling 1722 in number or 38 percent of

TABLE 4

Functional Classification of 4548 Office Tasks
by Age Groups and by Number of Workers

Function of Task	16-18		19-21		22-24+		Totals	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Accounting and Computing	92	20	504	23	470	24	1066	23
Electronic Data Processing	15	3	121	6	142	7	278	6
Personnel	14	3	91	4	108	6	213	5
Production	0	-	14	1	20	1	34	1
Purchasing	5	1	50	2	60	3	115	3
Shipping and Receiving	11	3	32	1	50	3	93	2
Sales and Client Related	12	3	67	3	54	3	133	3
Communication--Stenography, Typewriting, Oral	183	39	823	38	716	37	1722	38
Other Services (mail, files, etc.)	133	29	446	21	315	16	894	20
TOTALS	465	101	2148	99	1935	99	4548	101

all coded tasks. Compared with the later hand reclassification of task sheets (as described in Chapter II) in which these kinds of tasks were attached to other than service functions such as sales or personnel, the area of communication--stenography, typewriting, and oral later accounted for 945 task sheets in number or 20.7 percent of all reclassified tasks.

2. Educational Background

None of the 1232 workers in cases submitted possessed a baccalaureate degree. To determine this fact, the interviewee responded to two questions:

23. Highest School Grade Completed: K-8 9 10 11 12 13 14 15 16+

24. Bachelor's Degree: Yes No

The seven workers listed in Table 5 as completing 16 years of education without holding a baccalaureate degree is not in error. In each of these cases, interviewers rechecked to insure that the education was of "less than baccalaureate degree" as specified in the proposal. While the highest grade completed was not recorded for 19 workers, each interviewer had checked that the worker did not have a baccalaureate degree.

Even more clearly than the tables on age, Table 5 shows the present tendency of employers to hire at least high school graduates for office jobs. Fewer than 4 percent of the 1232 office workers had completed less than the twelfth grade in school. At the higher grade levels, however, those beyond the community college level account for approximately 5 percent of the workers.

3. Job Classification

While job classification was not a factor in the sample design, a modification of the Administrative Management Society office job clusters was used to classify 1232 workers. Table 6 shows numbers and percents of workers in each classification and the mean age of workers in each cluster.

TABLE 5

Highest Grade Completed by 1232 Office Workers

Highest Grade Completed	Number	Percent
Ten	9	0.7
Eleven	33	2.7
Twelve	672	54.5
Thirteen	247	20.1
Fourteen	191	15.5
Fifteen	54	4.4
Sixteen	7	0.5
Grade Not Recorded	19	1.5
TOTALS	1232	99.9

TABLE 6

Number, Percent, and Mean Age of 1232 Office Workers (16-24 Years of Age) by Job Classification Clusters

Job Classification Clusters	Number	Percent	Mean Age
Mail Clerk and Messenger	29	2.3	20.1
File Clerk	41	3.3	20.5
Clerk Typist	171	13.9	20.6
General Clerk	135	11.0	20.9
Telephone Operator and Receptionist	48	3.9	21.1
Stenographer and Secretary	285	23.1	21.1
Office Machine Operator	32	2.6	21.3
Public Contact Operator	77	6.3	21.4
Accounting Clerk	251	20.4	21.4
Material Support	35	2.8	21.7
Data Processing Operator	128	10.4	22.4
TOTALS	1232	100.0	21.1

The findings reported about mean age in terms of classification of tasks by functions (Table 4) seem to hold for job classification clusters. The mean age of mail clerks, messengers, file clerks, clerk-typists, and general clerks were below the mean of all workers (M = 21.1) suggesting the simpler job tasks to be found in these clusters. That stenographers and secretaries, as revealed in Table 6, are older than clerk typists would be expected because of the usual added skill of shorthand required of stenographers as well as because of the added maturity expected of some high level secretaries approaching an administrative assistant level of classification. Although the general clerk cluster was slightly below the mean, further analysis showed a bimodal distribution according to age with a low and a high mode. As an observation of the authors, some general clerks would appear to be assigned a set of simple entry level tasks while others are assigned higher level performances. Of course, that some low talented individuals continue performance of nonskillful tasks regardless of age must also be considered.

When the interview cases were grouped according to departmental assignment and job cluster (Table 7) accounting clerk, stenographer-secretary, typist clerk, and the general clerk were represented in each department. Accounting, credit; general, indeterminate; and services were the three departments that had interview cases appearing in each of the eleven job classification clusters.

TABLE 7

1232 Interview Cases Grouped by Job Classification
Clusters and Departmental Assignments

1 - Accounting, Credit
2 - Data Processing
3 - Personnel
4 - Production
5 - Purchasing
6 - Receiving and Shipping
7 - Sales
8 - Services
9 - General or Indeterminate

JOB CLASSIFICATION CLUSTER	DEPARTMENTS									TOTALS	
	1	2	3	4	5	6	7	8	9	No.	Percent
Stenographer, Secretary	30	3	37	15	8	1	27	52	112	285	23
Accounting Clerk	181	4	4	4	3	1	10	10	34	251	20
Typist Clerk	22	2	18	7	10	1	13	44	54	171	14
General Clerk	21	3	11	7	7	2	12	19	53	135	11
Data Processing Operator	21	87	1	1	0	1	4	3	10	128	10
Public Contact Operator	22	0	6	1	1	0	7	19	21	77	6
Telephone Operator, Receptionist	5	1	7	0	0	1	0	13	21	48	4
File Clerk	5	1	2	0	1	0	5	15	12	41	3
Material Support	5	1	0	1	3	6	5	5	9	35	3
Office Machine Operator	11	3	0	0	0	0	2	11	5	32	3
Mail Clerk, Messenger	3	1	0	0	0	0	0	20	5	29	2
TOTALS	326	106	86	36	33	13	85	211	336	1232	99

The curriculum implications of the foregoing discussion are not clearly delineated. Should the curriculum be based on the assumption of mass education serving a maximum of youth with a single series of learning experiences? If so, preparation for office jobs should include a range of typical job tasks that represent the work performed in many functional departments. This shot gun type blast curriculum arrangement seems to be feasible considering present public school institutional arrangements. Still, office curriculum must provide for the heuristics or the "learning to learn" behaviors that must be available for the beginning worker to gain the breadth and depth of performance in the specific job and specific department in which the beginner later finds himself.

We do not rule out the further development of autoinstructional technology that will permit a zeroing in in depth on a limited set of a specific department's performances, such as performances in the personnel department. Ideally, the breadth of interdepartmental performances and the interrelatedness of, say, the personnel department's performances to those of each other department and thus the total enterprise may best be learned through in-depth instruction of actions to be performed in the personnel department, as well as every other department. Still curriculum developers of 1970 should probably develop in an ascending spiral of difficulty--from simple to complex--performances expected in a variety of functional departmental business units. To accomplish the foregoing spiral of simple to complex learnings, further study to arrange the current performance goals according to levels of difficulty will be required. In the meantime, professional judgments will need to be used to accomplish the present desired learning sequence, the result in expected learning behaviors then to be classroom tested.

4. Sex and Departments

Table 8 is grouped according to sex of the workers interviewed and the department to which they were attached. By ratio of males, 177 of 1232, is equal to 14 percent of the sample, or a ratio of approximately 1 male to 7 females rather than the proposed 1 to 4 or 1 to 5. Since interviewers were attempting to provide one male case for every two female cases prior to modification of the ratio as described in Chapter II, we are unable to account for the discrepancy.

TABLE 8

1232 Interview Cases Grouped by Sex and
Departments to Which Workers
Were Assigned

DEPARTMENT	MALE		FEMALE	
	No.	Percent	No.	Percent
Accounting, Credit	52	29	274	26
Data Processing	27	15	79	8
Personnel	3	2	83	8
Production	8	5	28	3
Purchasing	3	2	30	3
Receiving and Shipping	4	2	9	1
Sales	11	6	74	7
Services	35	20	176	17
General, Indeterminate	34	19	302	28
TOTALS	177	100	1055	101

5. Standard Industrial Classification

By design, approximately two-thirds of the job stations examined were to be from SICs of service; public administration; finance, insurance, and real estate; and manufacturing types of businesses. In Table 9, the 1232 cases are arranged according to these four SICs plus agriculture, transportation, and wholesale and retail trade types of businesses. Of the 1232 cases, 1007 in number, or 81.7 percent, were accounted for in the designated four SICs, a 15 percent higher bias than proposed.

TABLE 9

SICs of 1232 Interview Cases

SIC	Number	Percent
Service	157	12.7
Public Administration	220	17.9
Finance, Insurance, Real Estate	253	20.5
Manufacturing	377	30.6
Agriculture	28	2.3
Transportation	97	7.9
Wholesale and Retail Trade	100	8.1
TOTALS	1232	100.0

What differences in preparation should the type of business make in a learnings program? Pondering the above question caused us to isolate the basic task sheets from two service type industries: banking and medical. The educational performance goals from these are presented separately in Chapter IV. We are not sure though that curriculum implications are clear. In a town dominated by one industry, the peculiar jargon and processes that attach to the industry could be taught in school. Yet, in large metropolitan areas having many different SIC businesses the potential of formal teaching of all technical jargon is not feasible. Perhaps the most feasible direction without further evidence is to include in learnings programs job tasks representing industries which by census data employ the most office workers, now and in the future. In addition to the four SICs accounting for two-thirds of office workers (service; public administration; finance, insurance, and real estate; and manufacturing) it will be remembered that wholesale and retail trade SIC is expected to increase by 1 million clerical and kindred workers from 1960 to 1975 (Table 1, p. 4).

Again, as in the discussion of job classifications and departmental assignments of workers (Table 7), the "learning to learn" concept would seem to be an office curriculum ingredient that must be included. Office curriculum in public education can not usually anticipate specific department or type of business in which trainees will later obtain employment. Much of the breadth and depth of behaviors necessary for successful job performance will have to be learned on the job. And in this job learning, the heuristics of learning would seem to be necessary because of the unevenness of business operated on-the-job-training programs.

6. Standard Metropolitan Statistical Areas

Geographic size in which businesses were located was proposed as a factor in the judgmental sampling design. A ratio of seven-ninths of all field data were to be collected from SMSAs of 100,000 or more population. Of the 1232 cases, 1109 cases in number, or 90 percent, were from SMSAs of 100,000 or more, again a sample bias toward metropolitan areas. In terms of the future office, the sample bias is toward the trend of urbanization. In plotting SMSAs according to departmental affiliations, as we have done in Table 10, we find little difference in affiliation as between those cases from SMSAs of over 100,000 and those cases from less than 100,000 geographic areas.

TABLE 10

1232 Interview Cases Grouped by Department Affiliation in Large (+100,000) and Small (-100,000) Population Areas

DEPARTMENT	No.	Percent	No.	Percent
Accounting, Credit	287	26	39	32
Data Processing	96	9	10	8
Personnel	74	7	12	10
Production	30	3	6	5
Purchasing	29	3	4	3
Receiving, Shipping	10	1	3	2
Sales	80	7	5	4
Services	197	18	14	11
General, Indeterminate	306	28	30	24
TOTALS	1109	102	123	99

7. Size of Companies

Four-fifths of the cases were proposed from companies employing 100 or more workers. Of 1232 workers, 1003 cases in number, or 81 percent, represented the larger companies so defined (Table 11). As plotted according to departmental affiliations of workers, differences noted are those that would be expected. Double the percent of workers in small companies than in large were "general or indeterminant" suggesting a less formal departmental organization in the small company. Also suggested is the broader classification of workers toward the "Jack-of-all-trades" kind of office worker in the smaller companies. That the large companies have double the rate of workers in data processing and service departments (such as central duplicating or files) than in small is expected.

8. Adequacy of the Sample Cases

Claims to a statistically drawn sample of cases have not been made. Discrepancies from the judgmental design have tended toward greater representation of the large company in the urban setting. That a statistically drawn sample would have yielded dramatically different results utilizing our instruments is questionable. At least one area director commented on the redundancy of the data collected:

> A considerable number of the more thoughtful interviewers suggested that after a few cases, they were not securing essentially new data. Analysis of the interview forms by the investigator and others who studied the write ups gives the same impression (Tonne, 1969).

TABLE 11

1232 Interview Cases Grouped by Department Affiliation in Large (100 plus employees) and Small (less than 100) Companies

DEPARTMENT	NUMBER AND PERCENT OF EMPLOYEES			
	+100		-100	
	No.	Percent	No.	Percent
Accounting, Credit	272	27	54	24
Data Processing	95	10	11	5
Personnel	78	8	8	4
Production	33	3	3	1
Purchasing	27	3	6	3
Receiving and Shipping	12	1	1	-
Sales	69	7	16	7
Services	190	19	21	9
General, Indeterminate	227	23	109	48
TOTALS	1003	101	229	101

Yet, some evidence would indicate that data collected do not represent a saturation of all potential office tasks performed within a particular type of business. For example, of 186 basic tasks of hospital and medical service workers as separated, none represents purchasing, drug dispensing, inventory, or food-handling type tasks. The sample was either too small or the selection of medical office workers by personnel supervisors was biased toward office workers performing client related services.

As an opinion, a more serious criticism of data reported can be leveled at the limitations of the method. Our study of the basic tasks of office jobs as identified by supervisors and employees does not get at the depth of performance we might like. Since workers were not observed but interviewed, information about criteria of successful task performance as collected is too generalized to be educationally meaningful. We are unable to prepare criteria of successful task performance, in other words, from interviewee's definitions of success.

Some would argue that narrowing the study to a particular job classification would permit the analysis in depth. Most of those participating in NOBELS could see a multitude of additional studies to secure different analyses of office performances. Representative of the view is the following from one area director:

> In any study of the future, it may be found wise to reduce the number of cases and study them in much more detail. The usual interview with an employee took around an hour and a half and the time for write up somewhat longer. It would be difficult to get more time from supervisors and employees; in fact, the amount of time spent on the job was probably caused by the awareness of need for limitations of time. Nevertheless, consideration should be given to devoting more time to each interview even at the expense of securing fewer interviews. (Tonne, 1969).

Within the limitations cited, the data represents a first systematic collection of office performances representing the basic tasks of 1232 office workers located in four regions of the country. That other types of study will contribute added perceptions or strengthen the current outputs is to be expected. Yet NOBELS does provide a necessary foundation of substantial data to which others can add.

C. CRITICAL REQUIREMENTS OF OFFICE WORK

1. The Worker in Relation to His System

In the pilot data collection, 780 incidents of employee behavior were captured from supervisors. A useful classification scheme was derived from viewing the employee in relation to the business system in which he operated (Table 12). In each of the major categories, the supervisor was the source of the reported incident; "goodness" or "badness" of the incident was often colored by the specific supervisor's interpretation of a sometimes informal system. An attempt was made in pilot incidents in which coping behavior, defined as performance under stress, was tabulated (45 percent of the total were so classified).

TABLE 12

Pilot Classification of Critical Incidents by Worker Requirements in Relation to the Business System

	Number	Percent	No. of Coping
Skills and System Requirements			
Cognitive	115	14.7	19
Checking	93	11.9	5
Communication	67	8.6	44
Psychomotor	34	4.4	-
Self and System Demands			
Work Habits	56	7.2	26
Attitudinal, Affective, Within	128	16.4	86
Social Skills or Graces	94	12.1	94
Worker Interprets the System	91	11.7	42
Worker Instructs in, Describes, or Manages the System	46	5.9	24
Worker Modifies, Innovates, Creates, or Changes the System	56	7.2	8
TOTALS	780	100.1	348

"Coping" can take many forms. Examples of critical incidents involving various "coping" situations follows:

Coping with the system--trouble shooting, outside world:

> "Lost temper with policyholder and got into an argument. Required that supervisor personally visit customer to regain his goodwill."

"A client was in need of information that wasn't immediately available. She was able to satisfactorily delay him a few days until supervisor was able to compile the needed material."

Coping with the system--noise prevention, outside world.

"Tries to shield him from obnoxious and distasteful buyers. One man thinks from her treatment of him that the employer's attitude was a result of his day rather than the person individually."

"Became impatient and short-tempered with deliveryman who was argumentative regarding which office supplies were to be delivered."

Coping with the system--noise prevention, within system:

"At a rush period in another department, was quite ungracious about helping with the job, even though she receives extra help when her work piles up."

"North Central Report--delayed because teachers did not get their reports in on time. She secured material at the last minute. Completed report and delivered it personally to superintendent."

"She did all the filing in the office for a week because the other girls who also do filing were feeling ill and would rather type than file."

Coping with the system--trouble shooting, within system:

"She 'saved the day' when design calculations were lost in storage (5 year old job). She was able to reconstruct and find them with ease."

"There was a situation where changes had been made in previous travel arrangements for an engineer. All people concerned had not been informed. She was able to straighten the travel situation out without upsetting anyone. This problem had been created by another employee."

The awkwardness of the scheme derived from incidents classifiable in more than one area. Arbitrarily, the scheme was considered hierarchial. For example, that a worker could not find and issue medical documents from a library because he did not possess the technical vocabulary needed was classified as a cognitive skill, the first level of the scheme; that a librarian changed the shelving of pamphlets to make high-frequency called-for materials more readily accessible does exhibit a high level of cognitive skill, but was classified under "Worker modifies, innovates, creates, or changes the system." The scheme used in pilot classification also did not adequately discriminate as between social interaction and task related skill.

2. Task Related Incidents

In the principal data cases, 1738 task related incidents were reported. Four functional areas accounted for over three-fourths of the incidents (Table 13): communication, typing, stenography (35.8 percent); accounting

(26.9 percent); other services (14.0 percent); and electronic data processing (8.7 percent).

TABLE 13

Classification of 1738 Task Related Critical Incidents
Grouped According to Functional Area

FUNCTIONAL AREA	CRITICAL INCIDENTS Number Positive	Number Negative	Ratio (P÷N)	Total (P+N)	Percent of Total
Accounting	197	271	.7	468	26.9
Electronic Data Processing	64	88	.7	152	8.7
Personnel	37	40	.9	77	4.4
Production	12	15	.8	27	1.6
Purchasing	18	22	.8	40	2.3
Shipping and Receiving	11	21	.5	32	1.8
Sales	35	41	.9	76	4.4
Communication, Typing, Stenography	263	359	.7	622	35.8
Other Services	98	146	.7	244	14.0
TOTALS	735	1003	.7	1738	99.9

The ratios of positive to negative critical incidents reported in the data were .7 (positive divided by negative) in each of the above areas. The ratio expected was 1.0 since supervisors were asked to provide one positive and one negative incident.

In the categories of the classification of task related critical incidents checking skills were involved in 668 incidents, or 38.4 percent of the 1738 task related incidents. The categories and their percent of occurrence to the total are shown in Table 14.

TABLE 14

Task Related Critical Incidents
by Categories

Category	No.	Percent
Checking	668	38.4
Interpreting System	241	13.9
Other Cognitive	200	11.5
Work Habits	170	9.8
Psychomotor Skills	165	9.5
Affective-Within	129	7.4
Communication Skills	75	4.3
Instructing, Creating	54	3.1
Social Skills	36	2.1

3. "Fundamentals" of Office Education

Primarily from further analysis of task-related critical incidents according to their ratio of positive to negative incidents, but also from analysis of tasks and their steps, we believe we have formulated a tentative list of universals, i.e., behaviors that are fundamental to the successful performance of most office tasks.

In discussing task related critical incidents, the positive/negative ratio of incidents was mentioned. Interviewers had asked supervisors for one positive (successful) incident for each negative (less than successful) incident performed by the subject office worker. The ratio of positive to negative incidents expected was one to one (1.0). Because of the reluctance of supervisors to provide negative incidents as reported, the ratio of positive to negative might have been expected to be higher than one positive incident for each negative incident elicited. The ratio for each category of incident actually recorded follows:

TABLE 15

Ratio of Positive to Negative Task-Related Critical Incidents by Categories

Category	Ratio of P/N
Other Cognitive	1.6
Checking Skills	.3
Communication Skills	.4
Psychomotor Skills	1.6
Work Habits	.9
Affective, Within	.8
Social Skills	1.0
Interpreting the System	1.4
Instructing, Creating, Modifying	12.5
RATIO OF TOTAL (N=1738)	.7

The differences in ratios from what was exepcted, especially checking (.3); communication (.4); and instructing, creating, and modifying (12.5); caused us to formulate the following two fundamentals:

> Accuracy as a desired generalized behavior of office workers is a function of checking for potential error and of correcting error.
>
> Inadequate communication skills, both oral and written, are a frequent source of unsuccessful office performance. Communication skills adequate to instruct others or to modify office actions are sought by supervisors.

The frequency of tasks related to numerical data combined with the ratio of communication critical incidents cause us to further propose:

> Organizing and classifying of both numerical and verbal data--all symbolic data--are even more necessary behaviors in our emerging electronic technology than ever before.

While the educational implications of the foregoing fundamentals need further study, we believe it is not too early for every practitioner to increase emphasis of these "fundamentals" in current office education programs.

4. Social Interaction Requirements

In pilot data as well as first printouts of interaction critical incidents, we were dissatisfied with the classification scheme. A new scheme as described in Chapter II resulted. Also, the incidents purportedly included as interaction were frequently task related or vice versa. The critical incidents were each separately recorded on cards, hand sorted according to their interaction components, and reclassified by staff at the University of Georgia (Calhoun, 1970).

In analyzing the distribution of interaction incidents (Table 16) the greatest concentration was found to cover the worker's perception of role expectations within the formal company system in relations with clients.

TABLE 16

Distribution of 829 Usable Social Interaction Incidents

	Information		Reaction to Stress		Judgment/ Decision Making		Initiative, Creativity		Social Sensitivity		Total	Percent
I. Formal System	+[a]	-	+	-	+	-	+	-	+	-		
A. Internal												
1. Superior	19	6	4	21	11	24	13	4	26	24	152	18
2. Peers	30	5	1	6	4	5	6	2	10	20	89	11
3. Subordinates	8	1	0	4	0	3	1	2	4	5	28	3
B. External												
4. Customers	51	12	9	21	22	14	24	3	42	26	224	27
5. Salesmen	5	0	1	0	0	0	2	2	6	3	19	2
6. Others	6	4	4	3	7	4	8	1	15	3	55	7
II. Informal System												
A. Internal												
7. Superiors	1	1	4	3	1	11	7	1	8	8	45	5
8. Peers	4	0	4	13	7	22	9	0	69	45	173	21
9. Subordinates	1	0	1	0	0	0	1	0	1	3	7	1
B. External												
10. Customers	0	0	2	2	2	0	1	0	7	0	14	2
11. Salesmen	0	0	0	0	0	1	0	0	0	1	2	1
12. Others	0	0	3	0	0	7	3	0	7	1	21	2
TOTALS	125	29	33	73	54	91	75	15	195	139	829	
PERCENT	15	3	4	9	6	11	9	2	24	17		100

[a] +designates effective behaviors; - designates ineffective behaviors.

This category contained 224 incidents in number or 27 percent of the total. The second greatest concentration of total incidents was found to cover the worker's perception of relationships apart from role expectations in relations with peers. This category contained 173 in number or 21 percent of of the incidents. Relations with superiors ranked third in total number of incidents with 152 in number or 18 percent of the total. Within the formal system, most of the social interaction incidents occurred with customers and superiors; within the informal system, most of the incidents occurred with peers.

A majority of office social interaction incidents reported involves a worker's use of social sensitivity in dealing with situations involving customers or clients, their superiors, and their peers.

Examples of the specific incidents to follow illustrate kinds of educational interaction goals identified in the University of Georgia study.

Category 1--Relation to Superiors

a. Given a telephone call from a top management official to a supervisor who does not wish to be disturbed, the employee exhibits good judgment (1) identifies the name of the official as of major importance and (2) transfers the call immediately to the supervisor.

b. Given criticism concerning the performance of his work, the employee remains calm and controls emotions by (1) discussing the problem with the supervisor, (2) listening carefully and patiently to comments of supervisor, (3) refraining from taking out his anger on other employees, and (4) correcting any errors that have been made.

Category 2--Relation to Peers

a. Given a situation involving work with her peers in person or over the telephone, the worker exhibits patience, understanding, and tact by (1) using a pleasant voice, (2) explaining step-by-step procedures, (3) working through a few problem-type situations, and (4) correcting errors by further explanation or handling the job herself.

b. Given the responsibility for training another employee, the worker demonstrates ability and willingness to train the worker by (1) communicating knowledge and understanding of the job, (2) exhibiting a positive and enthusiastic attitude, (3) maintaining her own workload while training worker, (4) not imposing own standards of performance on other worker, and (5) being patient with and interested in other people.

Category 3--Relation to Subordinates

a. Given an employee under pressure to get his work out, he keeps office operating smoothly by (1) refraining from giving orders without stating reasons for them and (2) tactfully helping others who are having difficulty.

Category 4--Relation to Customers or Clients

a. Given a client seeking specific information which the worker is not able to deliver immediately, the worker makes a decision based on knowledge of the job and on the client's particular situation. (1) If the worker needs the information immediately, the worker must give him what he thinks his supervisor would approve and accepts the responsibility as well as the possibility for having made the wrong decision. If the worker does not require the information immediately, the worker tells him when he can have the information for him.

b. Given a customer who expresses discontent with the company's statement of her account (she believes the company has an incorrect balance), the worker patiently, courteously, and tactfully (1) determines that the customer does not understand the company's procedure in processing statements and (2) explains the procedure in such a way that the customer understands and accepts statement amounts.

c. Given a patient who comes in without an appointment, crying and hysterical, demanding to see a particular doctor who is unavailable, the worker patiently, sympathetically, and calmly talks with the customer (1) assuring the customer that she will receive the attention she needs and calming her emotional outbursts and (2) convincing the customer that the doctor she wants to see is not available and suggesting that she see someone else who might help her or that she see the person she wants to see now at a later time.

Category 5--Relation to Sales or Service Personnel

a. Given a request to telephone suppliers to order supplies for the company, the worker demonstrates initiative by (1) obtaining firm delivery date from the supplier and (2) securing all vital information concerning discounts and quantity purchases that will allow the company to save money.

b. Given a telephone inquiry from a vendor who has not received payments from the company (because of a backlog of work), the worker pacifies the vendor by (1) finding the cause of the late payment, (2) offering a truthful explanation to the vendor, and (3) assuring vendor that payment will be made immediately.

Category 6--Relation to Others

a. Given a call requesting confidential information on company employees, the worker resists pressure from the caller by following company policy in divulging information.

b. Given job applicants who are nervous about being processed and tested, the worker puts them at ease by (1) giving them helpful instructions about completing the forms, (2) pointing out problem areas on application blanks or test forms, and (3) exhibiting a friendly and personal interest in each applicant.

Category 7--Relation to Superiors

a. Given a superior who loses his composure in reprimanding or demanding work from the employee, the employee remains calm by (1) displaying no visible reaction to rudeness and (2) listening patiently to what is being said, thereby pacifying the superior.

b. Given procedures for obtaining information to be given to a superior (which procedures do not work smoothly), the employee is creative by suggesting new methods that may be tried to obtain the information.

Category 8--Relation to Peers

a. Given a typed report returned to the typist by reviewer who had proofed it, indicating errors to be corrected, the typist demonstrates the ability to accept constructive criticism by (1) recognizing and accepting fact that the reviewer is responsible for the report, including its accuracy, (2) listening attentively to explanation of errors by reviewer, without making excuses for errors, and (3) making necessary corrections on the report.

b. Given job tasks involving the handling of confidential information regarding employees and company business, the employee exhibits dependability by (1) tactfully refusing to discuss confidential information, both at work and off the job, (2) keeping confidential materials filed in the proper place, and (3) discussing confidential information only with persons authorized by the supervisor.

Category 9--Relation to Subordinates

a. Given a new employee who needs additional instruction and demonstration, the worker uses his knowledge by (1) explaining content of the job to the new worker and (2) describing the relationship of the employee's job to other jobs in the department.

b. Given a new employee, the worker demonstrates courtesy by introducing her to her co-workers and inviting new worker to join her for coffee.

Category 10--Relation to Customers or Clients

a. Given an emergency call, during supervisor's absence, requiring immediate action, the worker remains calm and obtains all necessary information to give caller by consulting sources available.

b. Given a customer who becomes upset and loses control of his emotions, the worker calms the customer by talking quietly with her and offering help in finding a solution to the problem.

Category 11--Relation to Sales or Service Personnel

a. Given a misunderstanding which occurs during communication with repairmen or salesmen, the worker controls the situation by refraining from showing any irritation or by resorting to namecalling.

Category 12--Relation to Others

a. Given an outsider who creates a disturbance on company premises, the worker handles the situation by calling necessary personnel to handle the incident.

b. Given an emergency telephone call for an employee of the company, the worker demonstrates initiative by obtaining all pertinent information from caller and locating employee as quickly as possible.

c. Given visitors touring the company, the worker builds a good image for the firm by courteously answering questions and offering to help them in any way she can.

D. SUPERVISOR AND EMPLOYEE IDENTIFICATION AND WEIGHTINGS OF BASIC TASKS

1. Functional Areas of Tasks Identified

Supervisors identified 3646 basic tasks in 1009 interview cases analyzed from the principal data collection period (page 2 of interview protocol, Appendix B). Employees identified a slightly larger number of 3763 in a parallel listing (page 5 of interview protocol). It will be remembered that the identification of basic tasks was not requested in the pilot data collection. According to functional areas, basic tasks as classified by function are displayed in Table 17.

TABLE 17

Basic Tasks According to Functional Areas as
Identified by Supervisors and Employees

	SUPERVISOR		EMPLOYEE	
	No.	Percent	No.	Percent
Accounting, Computing	832	22.8	870	23.1
Electronic Data Processing	222	6.1	242	6.4
Personnel	174	4.8	176	4.7
Production	35	1.0	33	.9
Purchasing	94	2.6	93	2.5
Shipping and Receiving	77	2.1	90	2.4
Sales and Client Related	103	2.8	113	3.
Stenographic and Other Communications	1349	37.0	1368	36.3
Other Services (mail, files, etc.)	760	20.8	778	20.7
TOTALS	3646	100.0	3763	100.0

As one would expect, the basic tasks as identified by supervisors and employees are similar. We suspect some of the homogeneity to have been aided by the interviewers who, after talking with supervisors, would attempt to reconcile with the employee the differences reported. At least the exact correspondence of both the tasks listed and their weights of importance as received from some interviewers cause us to think that interviewer suggestions may have influenced the results.

We mention again that "accounting and computing" as a functional area might better have been called "numerical data handling" to avoid misunderstanding that the tasks so classified do, to any great extent, represent educational tasks currently learned in bookkeeping or accounting courses. Principles of accounting and accounting as a system of analysis to be learned may need to be rationalized on other than their necessity in performing tasks so labeled.

2. Weightings of Importance of Basic Tasks

Both supervisors and employers weighed each basic task identified according to these elements of importance as described in the Instructions for Collecting Data and Writing Performance Statements (Appendix E).

Consequences

Question: "How would you evaluate the effect of an employee's error or the employee's failure to perform this task or a portion of it related to company financial loss or effects on people inside or outside your company? Would you say the error would bear:

Answer Choices:
Great consequences 1
Moderate consequences 2
Little if any consequences 3

Now ask additional basic tasks and A for each task as it is mentioned. When all tasks and all A's are listed, proceed with B, C, D, and E as follows:

Changing

Question: "Of all the tasks listed, do you see any of these tasks changing in the near future?" (Share what you have written on basic tasks with the supervisor to permit him to answer more easily on B-E)

Answer Choices: Yes 1 No 2

If the supervisor says a task is changing, ask "How changing?" and fill in answer at the bottom of page 2. DO NOT PROBE FOR EXISTING TASKS THAT SUPERVISOR SAYS ARE CHANGING. No data for performance statements (page 6) will be written up for old tasks that the supervisor says will shortly cease to exist.

Frequency

Question: "Of all tasks listed, how would you evaluate each as to frequency of performance."

Answer Choices:
Is this among the tasks most frequently performed? 1
Is this among tasks performed with medium frequency? 2
Is this infrequently performed--once in a long while? 3

Fill in C for all basic task information given. D is asked for all tasks listed after C is completed.

Time Spent

Question: "What percent of this employee's total time does she spend on (state tasks in order given)?"

Answer Choices: 1%-100%

A quick check by the interviewer after D is completed for all tasks listed should indicate a percent total at or near 100%. A total more than 10 percentage points off 100 results in the interviewer asking the interviewee which item(s) he would like to adjust to come closer to an actual 100.

Rank Tasks

Question: "Would you now rank the tasks you have mentioned in order of difficulty?" (It may be necessary to repeat tasks.)

Answer Choices:	Most difficult	1	(This is done for 6 or however many tasks listed.)
	Next most difficult	2	
	Next most difficult	3	
	Next most difficult	4	
	Next most difficult	5	
	Next most difficult	6	

After completing E, the interviewer now proceeds to page 3 to elicit specific incidents from the supervisor.

Again, we call attention to the homogeneity of the weightings as between supervisors and employees. Tables 18 and 19 are comparisons of responses of consequences of task performance and frequency of performance as between these two groups of respondents. While slight differences in functional areas are observed in the direction that one would expect, the nature of the evidence (opinions) causes us not to place too much reliance on them. With the exception of changing tasks as identified in the next section, results of further weightings obtained, i.e., percent of total time spent, and rank of difficulty are not reported.

TABLE 18

Comparison of Supervisor and Employee Responses to Consequences of Basic Task Performance

FUNCTION	SUPERVISOR 1 Great	 2 Avg.	 3 Little	 M	EMPLOYEE 1 Great	 2 Avg.	 3 Little	 M
Accounting, Computing	392	294	145	1.70	419	288	151	1.69
Electronic Data Processing	106	61	55	1.77	100	73	69	1.87
Personnel	86	48	37	1.71	91	50	35	1.68
Production	19	12	4	1.57	15	12	6	1.73
Purchasing	41	31	22	1.80	41	31	19	1.76
Inventory, Shipping, and Receiving	43	11	21	1.71	42	26	22	1.78
Sales and Client Related	51	36	16	1.66	57	40	15	1.62
Stenography and Other Communication	557	468	324	1.83	543	468	357	1.86
Other Services (mail, files)	279	263	216	1.92	271	249	258	1.98
TOTALS	1574	1224	840	1.80	1579	1237	932	1.83

Nonrespondents - Supervisors = 8 Employees = 15

TABLE 19

Comparisons of Supervisor and Employee Responses to Frequency of Basic Task Performance

FUNCTION	SUPERVISOR 1 High	 2 Medium	 3 Low	 M	EMPLOYEE 1 High	 2 Medium	 3 Low	 M
Accounting, Computing	560	173	99	1.45	553	186	120	1.50
Electronic Data Processing	149	45	28	1.45	151	57	34	1.52
Personnel	103	39	29	1.57	108	45	23	1.57
Production	26	5	4	1.37	24	6	3	1.36
Purchasing	41	31	22	1.80	43	25	25	1.81
Inventory, Shipping, and Receiving	38	24	14	1.68	44	34	12	1.65
Sales and Client Related	69	25	8	1.40	72	31	10	1.45
Stenography and Other Communication	832	342	174	1.51	817	366	185	1.54
Other Services (mail, files)	453	179	126	1.57	458	209	111	1.55
TOTALS	2271	863	504	1.51	2270	959	523	1.55

Nonrespondents - Supervisors = 8 Employees = 11

3. Changing Tasks Identified

Of 3646 basic tasks identified by supervisors, 279 in number or 7.7 percent were indicated as changing tasks. Of 3763 basic tasks identified by employees, 238 in number, or 6.3 percent, were so indicated (Table 20). The fact that employees were able to identify fewer changes than their supervisors is not surprising. Employees are once further removed from the point of decision making where changes are planned. If the foregoing reasoning is sound, we can also question supervisors' complete knowledge of potential changes to occur since they, too, are frequently removed from the point of decision making. In other words, we propose that the small percents of changing tasks identified do not represent adequately the weight of change that will affect office performances in the forseeable future. Other

TABLE 20

Supervisor and Employee Indicated Changing Tasks by Functional Areas

	SUPERVISOR No.	 Percent	EMPLOYEE No.	 Percent
Accounting, Computing	76	27.2	79	33.3
Electronic Data Processing	19	6.8	13	5.5
Personnel	20	7.2	13	5.5
Production	3	1.1	1	.4
Purchasing	8	2.9	10	4.2
Shipping and Receiving	5	1.8	1	.4
Sales and Client Related	9	3.2	9	3.8
Stenographic and Other Communication	93	33.3	77	32.4
Other Services (mail, files)	46	16.5	35	14.7
TOTALS	279	100.0	238	100.2

opinion on the "emergent" in changing office tasks are those outputs to be expected from Huffman's "Emergent Office Study," currently in preparation. A part of NOBELS, as described in Chapter I, prepublication copy of two tables from the forthcoming Huffman report are included as Appendix A.

Table 21 classifies reasons given by 179 supervisors and employees for changing tasks. Approximately three fourths of the reasons are classified under "mechanization" with 80 percent of these further classified as "electronic data processing." The classification of reasons substantially agrees with the University of Georgia's concurrent hardware study (Calhoun, 1970).

TABLE 21

Classification of 179 Causes Given for Changing Tasks of Employees

CLASSIFICATION	TOTAL No. of Responses	Percent
Mechanization:		
Electronic Data Processing	103	57
Other Equipment	26	15
Shift of Task Responsibility (to/from Others)	22	12
Change in Need for Task	14	8
Change in Organizational Structure	14	8
TOTALS	179	100

E. OBJECT OF TASK PERFORMANCE

The 4548 basic tasks collected from 1232 office workers, as described, were coded not only according to a function or to "what" the task related but also according to the object or "why" of the performance. As discussed in Chapter II, the "why" classification had limitations of reliability that caused us not to place too great a dependence on the coded results. Still, with the limitations cited, the tabulations do give some notions about the object or "why" of basic performance (Table 22).

F. ACTION VERBS AND SYNONYMS DESCRIBING STEPS OF TASK PERFORMANCE

Our purpose here is to describe the 108-verbs and synonyms used in classifying steps of basic task performances as described by 1232 workers.

1. Codified Action Verbs and the Taxonomy

The Taxonomy of Office Activities as an output of NOBELS was mentioned earlier (Huffman, Brady, et al., 1968). We attempted to classify steps of task performance by the taxonomy but found the scheme not usable for the following reasons:

TABLE 22

Object or Why of 4548 Basic Tasks

OBJECT OR WHY	Number of Tasks	Percent
Source Documents	1344	29.5
Negotiables and Investments	332	7.3
Correspondence	787	17.3
Electronic Data Processing Outputs	247	5.5
Files	226	5.0
Reports, Charts, and Other Tabulated Material	716	15.7
Inventory	139	3.1
Served People or Generated Ideas	757	16.6
TOTALS	4548	100.0

a. Office activities of 16 to 24 year old workers, NOBELS' target group interviewed, could not be classified in the three taxonomy domains of operating, interacting, and managing. Rather, with the exception of those actions related to social roles, the task verbs cluster around the input, processing, output classification of the single domain of operating.

b. Some verbs were too narrowly defined to describe the range of technical meaning of the words as actually used in offices. For example, the verb "average" was defined "to find the arithmetic mean," an accurate definition of one type of average but a definition which excludes all other meanings for describing centrality of business phenomena. Interestingly enough, the office tasks we studied did not require the use of the verb "average" to describe office actions.

c. Numerous taxonomy verbs, especially in the "interacting domain," were abstractions that were not defined in observable behavior. Thus, "empathize" as a verb is at least once removed in generality from actions that one would accept as evidence of "empathic behavior" in an office worker. While some behaviors collected about office workers in their social roles might be described as "empathic," to do so would have required a value judgment placed on the behavior actually observed.

d. The view of the taxonomy authors that a checklist of verbs could be used in observing task performance in an office did not match the realities of time and resources available for data collection.

e. Strict adherence to taxonomy verbs frequently resulted in awkwardness of expression of office tasks. For example, "types," a common verb used in office communication, had to be expressed as "copies with a typewriter," a somewhat stilted expression. The stilted expression resulted from the attempt to codify under one heading all copying: whether by pencil, duplicator, or typewriter.

The first taxonomy as described, however, was used as an important tool by all data collectors of NOBELS to provide specific verbs that described office actions observed. Thus, rather than using bland verbs such as "makes," "fixes," or "puts," data collectors selected specific verbs as "types," "keypunches," "files," or "checks."

2. Listings of NOBELS Action Verbs and Synonyms

Based on 244 interview cases from NOBELS pilot data collection, a tentative listing of 108 verbs describing office actions as reported by employees and interviewers was extracted. The need for analysis of verbs was considered to be one of grouping by synonyms rather than developing a taxonomic hierarchy of generic terms. The NOBELS action verbs, 108 in number, and synonyms, 118 in number, proved adequate in coding for computer tabulation of all the 32,447 steps contained in 4548 sheets taken from 1232 interviews.

An alphabetic listing of the 108 verbs used to code steps of basic tasks together with the current recommended listing of 57 verbs and their synonyms recommended as a result of our experience are included as Appendix E. A more complete discussion of the NOBELS Action Verbs and Synonyms in relation to the Taxonomy and in terms of the educational implications is available elsewhere (Lanham and Weber, 1970).

3. High-Frequency Verbs of Action Steps

In Table 23, the twenty most frequently used verbs tabulated from steps of basic tasks are displayed. The high frequency of input verbs such as "receives" and "obtains" as well as output verbs such as "delivers" probably results from the few verbs in these two categories compared with the processing category of task performance.

Tables 24, 25, and 26 display the ten most frequently used verbs in the nine functional areas with Table 24 listing ranks of three functions according to highest frequency; i.e., communication defined as stenography, typewriting, and oral communication; accounting which includes primarily numerical related tasks; and other services which include filing, mailing, and duplicating. Table 25 follows, according to descending order of frequency, with data processing, personnel, and client related services which include sales. Table 26 lists the three lowest frequency of functional tasks by rank in production, receiving and shipping, and purchasing.

That a few verbs, such as "punch" in electronic data processing are not among the first twenty most frequently used verbs listed in Table 23 is to be expected. Electronic data processing is still emerging as a functional office area with its own peculiar jargon. That the ten high ranked verbs of each functional area account for so high a ratio of all verbs codified in that area is consistent with the finding in Table 23.

G. TALENT INVENTORY AS A PART OF DIFFUSION

An integral part of NOBELS in all phases has been the dissemination process. Dissemination to the point of acceptance and adoption in classrooms is based first on identification of various levels of talent in office and business education and systematically recording talent information in data banks. During the feasibility study (Lanham, 1968) the beginnings of a data bank of teacher educators, state supervisors, and city supervisors were collected, coded, and processed. A talent inventory instrument was also field tested, using the above listed decision makers as the test group.

TABLE 23

Twenty Most Frequently Used Verbs Describing Steps of Basic Task Performance

		CUMULATIVE	
Rank	Verbs	Total Number	Percent of 32,447
1	receive	2933	9.0
2	typewrite	1925	5.9
3	deliver	1923	5.9
4	write	1677	5.2
5	file	1640	5.1
6	place	1504	4.7
7	check	1389	4.3
8	obtain	1345	4.1
9	send	996	3.1
10	record	958	2.9
11	sort	945	2.9
12	insert	788	2.4
13	determine	632	1.9
14	pull	578	1.8
15	inform	547	1.7
16	attach	525	1.6
17	call	520	1.6
18	compute	503	1.6
19	answer	501	1.6
20	locate	485	1.6
TOTALS		22,314	68.8*

*Discrepancy due to rounding

In the current phase of NOBELS, additional refining of the talent inventory instrument and processing procedures was proposed. Additionally, utilization of the instruments to develop a national data bank of talent and testing the national plan in one state defined the scope of work (Cook et al., 1970).

H. SUMMARY

In this chapter, the results of interview data collection from 1232 office workers and their supervisors in four areas of the country have been disclosed. The bias of the cases toward the urban and large company beyond that projected in the proposal and the consequent adequacy of the sample have been discussed. Results of analysis of critical incidents collected in the pilot study and the task related and interaction incidents of the principal data collection have been reported. Samples of social interaction performance goals were given. Samples of task-related incidents are sprinkled in the next chapter among the performance goals to

2

TABLE 24

Ten Most Frequently Used Verbs Describing Steps of Basic Task Performance in Communication Services, Accounting, and Other Services[1]

Communication Services			Accounting			Other Services		
Rank		No.	Rank		No.	Rank		No.
1	typewrite	1139	1	receive	769	1	receive	473
2	receive	1051	2	write	598	2	sort	433
3	deliver	602	3	check	481	3	file	419
4	obtain	589	4	deliver	476	4	deliver	364
5	write	512	5	record	458	5	place	360
6	file	489	6	file	408	6	obtain	225
7	place	464	7	place	379	7	check	186
8	answer	401	8	typewrite	354	8	insert	179
9	check	400	9	send	292	9	attach	150
10	proofread	364	10	obtain	283	10	open	147
TOTALS		6,011			4,498			2,936

[1] Communication includes stenography, typewriting, and oral communication; Other Services include filing, mailing, and duplicating.

TABLE 25

Ten Most Frequently Used Verbs Describing Steps of Basic Task Performance in Data Processing, Personnel, and Client Related Services

Data Processing			Personnel			Client Related Services		
Rank		No.	Rank		No.	Rank		No.
1	receive	176	1	typewrite	139	1	receive	115
2	punch	151	2	receive	136	2	write	96
3	deliver	136	3	deliver	113	3	deliver	76
4	place	112	4	file	97	4	typewrite	56
5	obtain	87	5	write	84	5	file	52
6	check	85	6	check	73	6	place	50
7	remove	71	7	send	60	7	record	49
8	write	70	8	obtain	59	8	check	41
9	record	68	9	record	55	9	send	35
10	insert	59	10	inform	53	10	call	33
TOTALS		1,015			869			603

which they relate. Analyses of basic tasks and their weightings of importance as elicited from supervisors and employees were presented. In relation to the discussion of changing tasks identified, the correlative study of the emergent office was cited. The tabulation of the "why" or object of 4548 codified tasks were displayed. The action verbs and synonyms growing out of the taxonomy of office activities were presented. The chapter closes with a description of the scope of the talent inventory.

TABLE 26

Ten Most Frequently Used Verbs Describing Steps of Basic Task Performance in Production, Purchasing, and Receiving and Shipping

Production			Receiving and Shipping			Purchasing		
Rank		No.	Rank		No.	Rank		No.
1	receive	38	1	receive	77	1	receive	98
2	write	33	2	check	64	2	write	71
3	deliver	21	3	deliver	61	3	check	64
4	file	17	4	file	39	4	deliver	54
5	check	15	5	typewrite	38	5	send	51
6	typewrite	14	6	call	35	6	file	49
7	place	11	7	write	29	7	place	48
8	obtain	8	8	obtain	27	8	obtain	38
9	send	8	9	place	26	9	typewrite	35
10	duplicate	7	10	send	21	10	record	31
TOTALS		172			417			539

Throughout the chapter, interpretations concerning the meaning of the data presented as they relate to New Business and Office Education Learnings System have been posed. Frequently in the form of clues or hunches, these interpretations must be considered further in Chapter IV in presenting the performance goals of office occupations as well as in recommendations of the final chapter.

Chapter IV

PERFORMANCE GOALS FOR OFFICE EDUCATION

A. SOURCE OF PERFORMANCE GOALS

The purpose of this chapter is to present 375 performance goals developed from NOBELS data to represent office occupations, the primary output of the current project. The performance goals were generalized and thus elicited from 4564 classified tasks, 16 more than were coded for computer printouts. The discrepancy resulted from (1) a few task sheets that contained more than one analyzed task on each sheet and had been coded as one task and (2) some tasks analyzed as two or three separate tasks by interviewers had been judged and coded as a single task. In the hand sorting, the tasks were treated separately. This resorting yielded 0.35 percent discrepancy. Each of the 4564 tasks had been analyzed according to 32,447 verbs as reported in Chapter III.

The primary criterion of data reduction was one of fidelity to the tasks performed as reported by interviewers. The interview process makes necessary the assumption that interviewers captured steps of task performance as described. The NOBELS process has the advantage over some other interview techniques, however, of eliciting steps of performance from the performer rather than his supervisor or some other functionary remote from the performance.

B. USES OF THE SET OF OFFICE PERFORMANCE GOALS

The set of office performance goals presented provides a base for analysis and modification of current office education preparation. Here are some of the more obvious and immediate uses that are suggested:

1. Textbook authors and publishers of materials for office education preparation will want to re-examine current and projected materials to determine their relevancy of coverage in whatever media available or contemplated.

2. State and local supervisors of business and office education or other curriculum framers now possess a reservoir of current office performances to help evaluate the adequacy of present programs or to organize improved packages of learnings pointed toward competency of performance in office work.

3. Business and office teacher educators, some for the first time, now have a pool of authentic office behaviors to teach the specificity of the behaviorist's goal statements and the discipline of system control of learning in pre- and in-service programs of teachers.

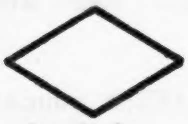
4. Curriculum directors of certain lighthouse developments, such as ES '70, can "plug in" the current goals or combine them in various ways with others as promising recombinations or reorganizations of school learnings are visualized.

5. The classroom teacher? His first step is one of embracing the behaviorist's view that expected learning can be specified in observable behaviors amenable to assessment. His second step is to insist from all those suppliers of classroom learning materials and curriculum framers that they contribute curriculum and materials that do, in fact, lead to performance of learners equal to those expected in offices. His third step is one of innovating, possibly developing and testing from observed gaps in current instruction and what is suggested by the current list of performances one lesson or one unit of instruction per year in which the behavioral output can be measured in observed actions of the learner.

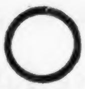
6. The learners? Students have too often been last to be exposed to the specific expectations of employers for office performance. As an instructional (to some) innovation, we propose that students, those contemplating office employment or those committed to prepare for office work, have access to this set of office expectations. We propose that students be encouraged to assess the relevancy of their learnings by assessing, informally or formally, the various media of classroom application with the reality and currency of the office performance goals reported here.

C. FORM AND FORMAT USED TO PRESENT PERFORMANCE GOALS

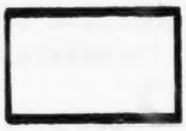
Many judgmental decisions were made during the process of sorting and resorting task sheets to develop performance goals. One early decision was made that clarity was improved by visualizing similar task steps through flowcharting. In the presentation to follow, a flowchart of a performance goal is included when the process of steps involves more than a straight-line or sequential flow without alternative steps or decision points. Varying sizes of the following symbols are used to accommodate layout:



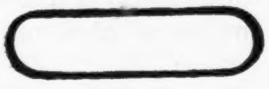
Decision



Start, End,
Continuation



Acquisition,
Disposition



Process

In some flowcharted performance goals, it was found unnecessary to repeat the graphic presentation by including printed steps of flow. Wherever clarity was judged to be improved, however, both the flowchart and the listing of steps represented in the performance are given.

The statement of each performance goal, representing a generalized but similar performance of a worker or workers begins with a "Given" phrase followed by a statement of what the worker does. For example,

GIVEN EXPENSE SHEETS AND/OR TOTAL SALES FIGURES, THE WORKER COMPUTES AND ALLOCATES UNIT COSTS TO JOBS AND SALES/PRODUCTION ESTIMATES. (33 task sheets)

The "Given" phrase followed by the task is the one feature contained in all performance goals listed. Note that in format all performance goal statements are written in upper case and followed by the number of task sheets represented. Some summaries of task sheets are more detailed than others usually because they represent a larger number of task sheets than others. The steps of performance in these detailed summaries are arranged in three major divisions (1) acquisition, i.e., the source or sources of or materials on which the task is to be performed; (2) process, i.e., the sequence of actions taken by the worker to perform the task; and (3) disposition, i.e., what the worker does with the product or output generated.

Detailed summary performance goals also include:

(1) A listing of "hardware," i.e., materials of wood, metal, or harder consistency like machines used.

(2) A listing of software, i.e., the programs, policy manuals, catalogues, or references used.

(3) Educational cues, i.e., the suggestions of the goal writers (all classroom practitioners) of implied instructional key elements for teaching.

(4) Supplementary steps, i.e., alternatives of performance or steps performed by a few workers.

(5) Reported criteria, i.e., requirements of successful performance as quoted directly from the task sheets.

Other goals usually based on less frequent occurrence are presented with less detail than the foregoing. In these less detailed presentations, steps were given beginning with an underlined action verb and they are not subsumed under major categories of acquisition, process, and disposition.

Sixteen major verbs, each cast in upper case, serve to classify all action verbs under the divisions of acquisition, process, or disposition. The action verbs of steps subsumed under these sixteen major verbs are displayed in Chart 5. Upper and lower case verbs without parentheses are used to indicate one of the 108 verbs used to codify steps in NOBELS task sheets. Lower case verbs within parentheses indicate synonyms of a NOBELS verb or a specialized verb used.

Examples of task related critical incidents are sprinkled throughout the presentation of goals. These instances elicited from supervisors, it will be remembered, characterize successful or less than successful worker task performance. As space permitted, the examples are cited after most major areas of goals or with statements of specific performance goals.

As an aid to reading the performance goals, you should be aware of certain conventions in abbreviations and special words used in flowcharts as follows: PO (purchase order), A/R (accounts receivable), A/P (accounts payable), B/L (bill of lading)--used in other performance goal features: TV (television), ID (identification), wpm (words perminute), VA (Veterans

Chart 5

Major Verb Categories with Their Subsumed Verbs

MAJOR VERB CATEGORY	SUBSUMED VERBS
CALL	Wire (page, phone, telephone)
CHECK	Adjust, Correct, Inquire, Oversee, Proofread, Scan, Test, Verify (confirm, examine, inspect, update)
COMPILE	Arrange, Attach, Batch, Bind, Collate, Collect, Cut, List, Obtain, Select (choose, gather, get, make)
COMPOSE	Convert, Draw, Sign, Write (make up)
COMPUTE	Add, Count, Divide, Extend, Multiply, Quote, Reconcile, Run Tape, Subtract, Total (balance, calculate, figure)
DELIVER	Deposit, Destroy, Disburse, Distribute, Issue, Place, Refer, Request, Route, Send, Transfer (give to, hand to, present, put, submit, transmit)
DETERMINE	Assign, Devise, Evaluate (decide, design, formulate)
DUPLICATE	Photograph (copy, mimeograph, photocopy, Xerox)
FILE	Destroy, Hold, Locate, Maintain, Pull, Refer, Remove, Search, Sort (extract, find, go through, look up, take from, trace)
INFORM	Answer, Assist, Direct, Discuss, Explain, Greet, Inquire, Instruct, Interview, Note, Post (on bulletin board), Repeat, Request (advise, confer, consult, describe, give direction, notify, remind, teach, tell, welcome)
MAIL	Address, Insert, Label, Open, Route, Seal, Send, Stamp, Wrap (forward, stuff, transmit)
OPERATE	(EDP) Code, Feed, Perform, Punch, Run Through, Sort, Wire (activate, program)
RECEIVE	Answer (phone), Greet, Hold, Obtain, Request, Take Dictation
RECORD	Add, Assign, Code, Complete, Label, List, Note, Post (to ledger), Sign, Stamp, Write (enter, fill in, journalize, log, mark)
SORT	Compare (index, match, separate)
TYPE	Teletype, Transcribe

Administration), FHA (Federal Housing Administration), COD (cash on delivery), IRS (Internal Revenue Service), MTST (Magnetic Tape Selectric Typewriter), TWX (Exchange Teletypewriter), cash receipts (cash and/or checks). Also, the name of department in unquoted materials is capitalized and the word department is not used; i.e., Payroll, Accounting, Keypunching.

As an aid to meaning, certain punctuation has been used in performance goals for visual representation as follows:

Diagonal	(/)	- indicates different task sheets as sources or the same task sheet as alternatives
Comma	(,)	- means "and"
Semicolon	(;)	- indicates material extracted from different task sheets

D. NUMERICAL CLASSIFICATION SCHEME

It will be remembered that 4564 task sheets and their resulting 375 performance goals for two standard industrial classifications were separated and are here presented in the first section of goals as follows:

Numerical Designation	SIC	No. of Task Sheets	No. of Goals
I	Finance, Insurance, Real Estate--Banking	286	63
II	Service--Medical	186	24

The remainder of 288 performance goals; classified by function, are presented in the second section of goals as follows:

Numerical Designation	Function	No. of Task Sheets	No. of Goals
1	Accounting	790	52
2	Electronic Data Processing	372	30
3	Personnel	374	24
4	Production	40	3
5	Purchasing	84	3
6	Shipping, Receiving, and Inventory	133	26
7	Sales	232	32
8	Client Related Services	330	47
9	Communication	962	19
10	Services	727	28
11	Miscellaneous (NEC)	48	24

E. SIC PERFORMANCE GOALS

I BANKING

1. GIVEN WRITTEN/ORAL REQUESTS TO OPEN NEW ACCOUNTS, TRANSFER ACCOUNTS, OR SET UP TRUST ACCOUNTS, THE WORKER OPENS NEW ACCOUNTS, HANDLES TRANSFERS OF ACCOUNTS, AND SETS UP TRUST ACCOUNTS FOR CUSTOMERS. (8 task sheets)

ACQUISITION

RECEIVES
request to open checking, savings, business, or personal account/request to set up trust account/request, authorization for transfer of account

PROCESS

Explains
kinds of checking accounts, bank services/service charges

CHECKS
trust account information/transfer card for completeness

Pulls,Stamps
old,new signature cards

TYPES
signature card, new account deposit slip/customer information on savings, new account report/ID card/ledger card, savings passbook/new record changes for Data Processing

Obtains
customer signature, personal data/supervisor's approval of new transfer card

Assigns
new account number

Writes
check order for personalized checks/ID from old card to new/transfer information on Data Processing change sheet

RECEIVES
deposit from customer

COMPILES
deposit book

Verifies
account number with main branch of bank

COMPUTES
savings account totals

RECORDS
account number on forms/totals on new accounts in ledger

DISPOSITION

FILES
old signature card in closed file/new signature card in open file

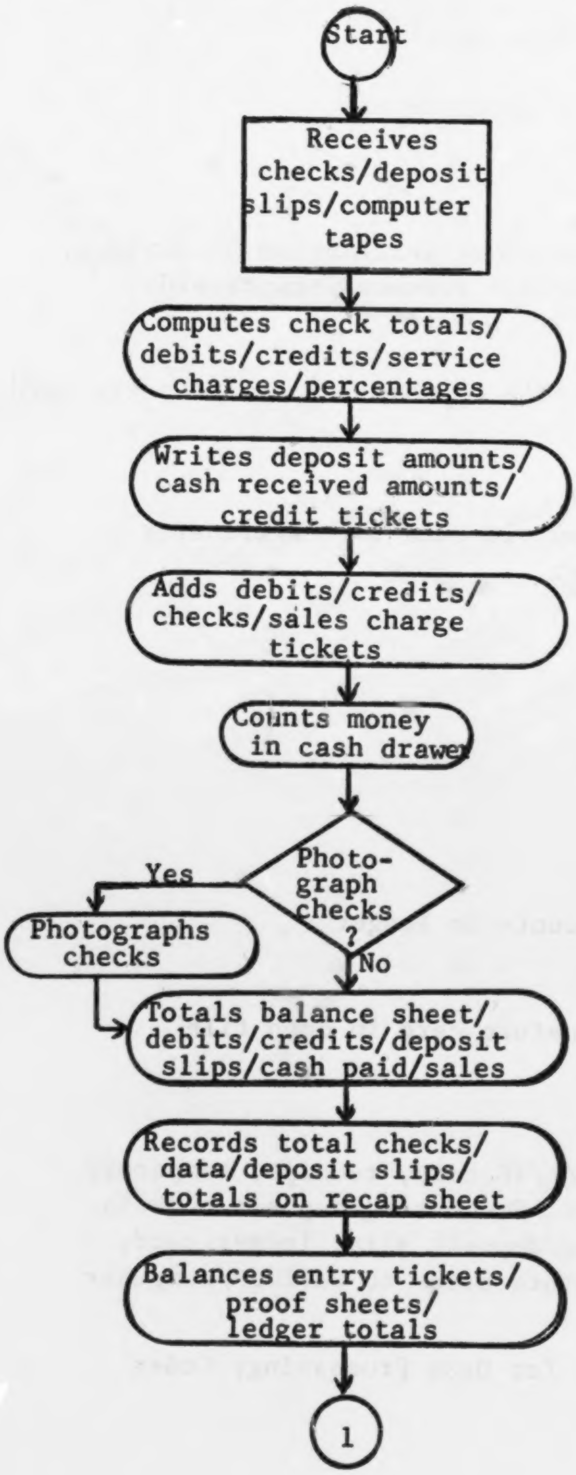
MAILS
check order

DELIVERS
signature card, deposit slip to Bookkeeping/ID card, receipt, temporary checks to customer/source documents to Data Processing/deposit book to customer/trust account form to Keypunching/deposit slip, ledger card, passbook to Posting/money to teller/signature cards to Savings/computer change sheet to Keypunching

SUPPLEMENTARY STEP: Codes source documents for Data Processing; Codes trust account information

HARDWARE	SOFTWARE	EDUCATIONAL CUES	REPORTED CRITERIA:
Typewriter	Check order	Typing	"Accuracy in processing of information; Familiar with types of accounts; High level experience needed; Accuracy"
Files	Signature cards	Filing	
Rubber stamp	Deposit slip	Accuracy	
	Cash receipts	Communication skills	

2. GIVEN SOURCE DOCUMENTS SUCH AS CANCELLED CHECKS, COMPUTER TAPES, AND TELLERS BALANCE SHEETS, THE WORKER COMPUTES AND BALANCES ITEMS. (21 task sheets)


Start
Receives checks/deposit slips/computer tapes
Computes check totals/ debits/credits/service charges/percentages
Writes deposit amounts/ cash received amounts/ credit tickets
Adds debits/credits/ checks/sales charge tickets
Counts money in cash drawer
Photo-graph checks ?
Yes
No
Photographs checks
Totals balance sheet/ debits/credits/deposit slips/cash paid/sales
Records total checks/ data/deposit slips/ totals on recap sheet
Balances entry tickets/ proof sheets/ ledger totals
1

ACQUISITION

RECEIVES
cancelled checks, adding machine tapes/ computer tapes, coding machine tapes/ batches of checks/tellers balance sheets/deposit slips/debit,credit tickets/computer rejected charge tickets (sales)/bank statements

Obtains
deposit tickets/statistical data/ all checks completely,partially cashed

PROCESS

COMPUTES
cancelled check total/total of checks computer rejected/bank balance/debits, credits/percentages/deposit slip totals/new cash balance/sales charge tickets/service charge/totals in ledger

Writes
deposit amount on summary sheet/current bank balance on summary sheet/amount of cash on tellers report form/total coins on coin sheet/bank balance form/totals of charges, credit tickets in charge accounts ledger

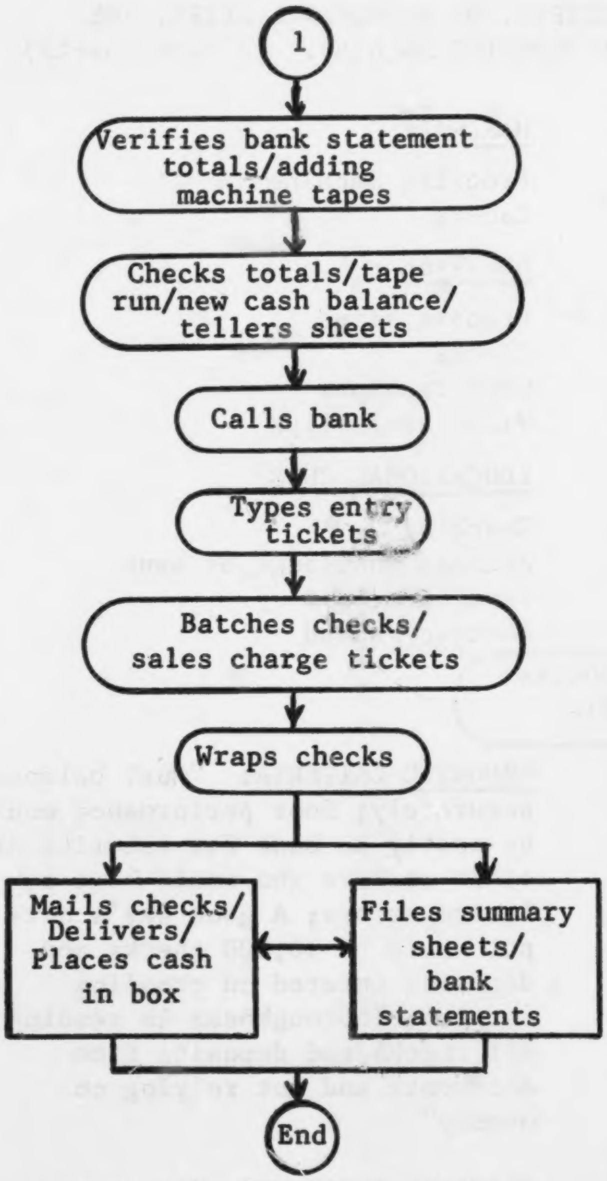
Adds
debits, credits, cashiers checks/all checks/sales charge tickets

Counts
money in cash drawer

(Photographs)
checks

Totals
balance sheet/debits,credits/deposit slips/cash paid out/sales from charge tickets

RECORDS
total computer rejected checks/checks drawn on summary sheet/data on graph/ deposit slip totals on master sheet/ totals on recap sheet/denomination of cash on balance sheet


1
Verifies bank statement totals/adding machine tapes
Checks totals/tape run/new cash balance/ tellers sheets
Calls bank
Types entry tickets
Batches checks/ sales charge tickets
Wraps checks
Mails checks/ Delivers/ Places cash in box
Files summary sheets/ bank statements
End

Balances
  entry tickets, proof sheets/ledger
Verifies
  bank statement totals/adding machine tapes
CHECKS
  totals/tape runs/new cash balance/
  tellers sheets
CALLS
  bank for lock-box figure (for checks
  sent directly to another bank)
TYPES
  entry tickets for batched stacks of
  debit, credit tickets
Batches
  checks, list of checks/sales charge
  tickets
Wraps
  checks
Inserts
  cancelled checks in envelopes

DISPOSITION

MAILS
  cancelled checks to branch/correspondent banks
FILES
  summary sheet/bank statements
DELIVERS
  master sheet of debits, credits to
  supervisor/graphs to supervisor/tellers
  reports to head teller/sales charge
  slips to Data Processing
Places
  cash in box

REPORTED CRITERIA:
"Must be accurate; A good knowledge of bookkeeping would be helpful but not a necessity; Relatively good in math, checking, proofreading; Cash must be balanced before worker leaves for day; Must work effectively with numbers, balance control sheet; All cash correctly totaled; Knowledge of debit, credit entries"

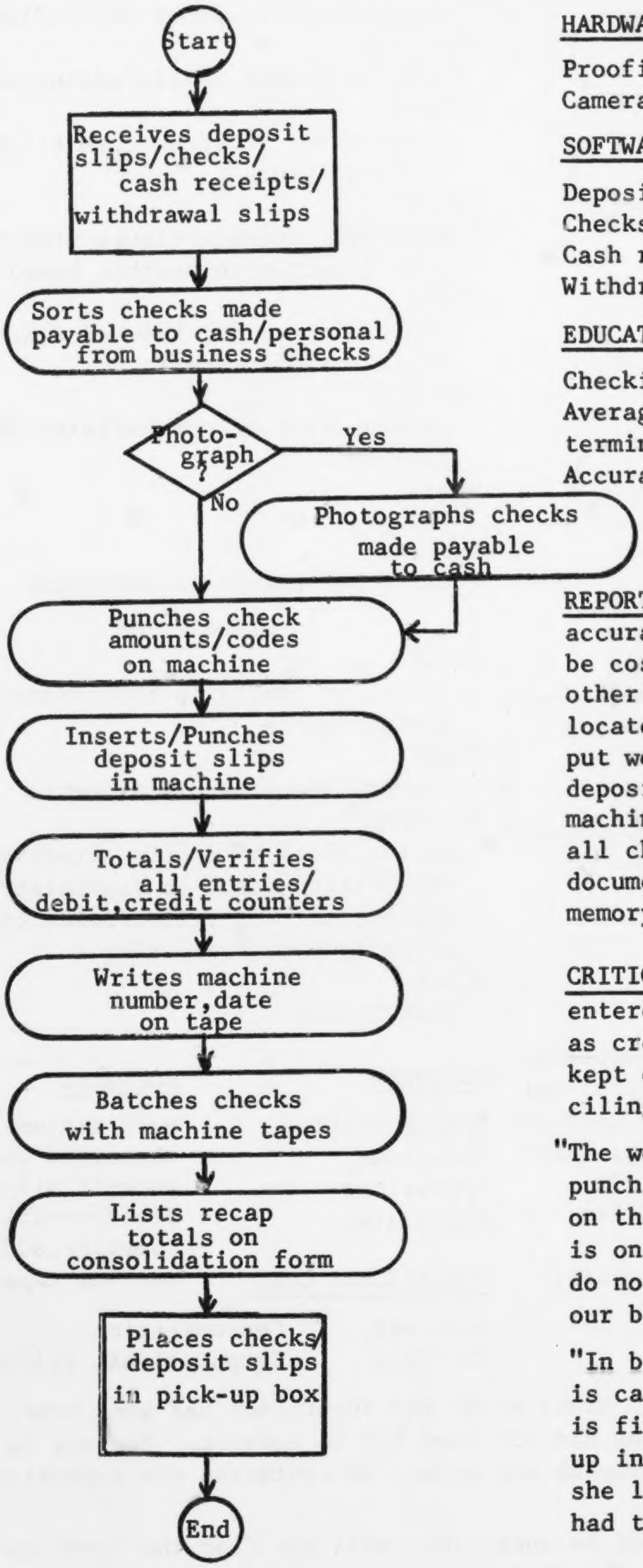
HARDWARE	SOFTWARE
Adding machine	Bank statements
Telephone	Cancelled checks
Typewriter	Deposit slips
Calculator	Debit/credit slips
	Computer,adding machine tapes

EDUCATIONAL CUES

Accuracy	Concentration
Checking	Computational skills

CRITICAL INCIDENTS: "Late at night after the supervisor had gone home, the worker discovered an error he did not know how to correct. Because he understood the consequences of leaving the error, he contacted the supervisor at home for assistance."
"The worker was $5,000 out of balance. He could not find the error so he clocked out and went home. The next day was an absolute waste."

3. GIVEN DEPOSIT SLIPS, CHECKS, CASH RECEIPTS, OR WITHDRAWAL SLIPS, THE WORKER CHECKS COMPUTATIONS BY USING A PROOFING MACHINE. (8 task sheets)


Start
Receives deposit slips/checks/ cash receipts/ withdrawal slips
Sorts checks made payable to cash/personal from business checks
Photo-graph ?
Yes
No
Photographs checks made payable to cash
Punches check amounts/codes on machine
Inserts/Punches deposit slips in machine
Totals/Verifies all entries/ debit,credit counters
Writes machine number,date on tape
Batches checks with machine tapes
Lists recap totals on consolidation form
Places checks/ deposit slips in pick-up box
End

HARDWARE

Proofing machine
Camera

SOFTWARE

Deposit slips
Checks
Cash receipts
Withdrawal slips

EDUCATIONAL CUES

Checking
Average knowledge of bank terminology
Accuracy/speed

REPORTED CRITERIA: "Must balance accurately; Poor performance would be costly to bank for salaries of other workers who would have to locate errors; A good day's output would be 10,000 checks and deposits entered on proofing machine; Thoroughness in reading all checks and deposits from documents and not relying on memory"

CRITICAL INCIDENTS: "The worker entered a $30,000 item on machine as credit instead of debit and kept overlooking this in reconciling."

"The worker has a tendency to punch the same figure that is on the check for the figure that is on the deposit slip. If they do not agree, this will throw our balance off."

"In balancing checks, the total is carried forward until worker is finished. The worker picked up incorrect total once because she looked at wrong tape. She had to re-proof batch of checks."

4. GIVEN AUDIT ASSIGNMENT SHEETS, THE WORKER PERFORMS AUDIT OF PARTICULAR FUNCTIONS IN INDIVIDUAL DEPARTMENTS OF THE BANK. (1 task sheet)

Receives audit assignment
Determines order in which, dates on which audits will be initiated
Arranges with co-workers for assistance with audit
Scans previous audits, directions on how to conduct audits
Obtains needed financial records such as ledger cards, computer listings, outstanding checks
Checks procedures used in maintaining financial records in department being audited
Balances financial records
Checks balances with ledger and computations
Locates most recent date financial records in balance to present date
Composes verifications to bank personnel on exceptions noted
Writes report on audit
Delivers audit report to supervisor in Auditing

CRITICAL INCIDENTS: "The worker discovered an embezzlement in one department because he was very persistent in questioning individual involved. He knew the answers were not correct."

"The worker failed to get facts straight from interviewee. He made his audit report based on erroneous information."

5. GIVEN TRANSACTION TICKETS AND TAX SERVICE REFERENCES, THE WORKER DETERMINES TAXABLE EFFECT OF TRANSACTIONS AND ENTERS TAX CODE ON TICKET. (1 task sheet)

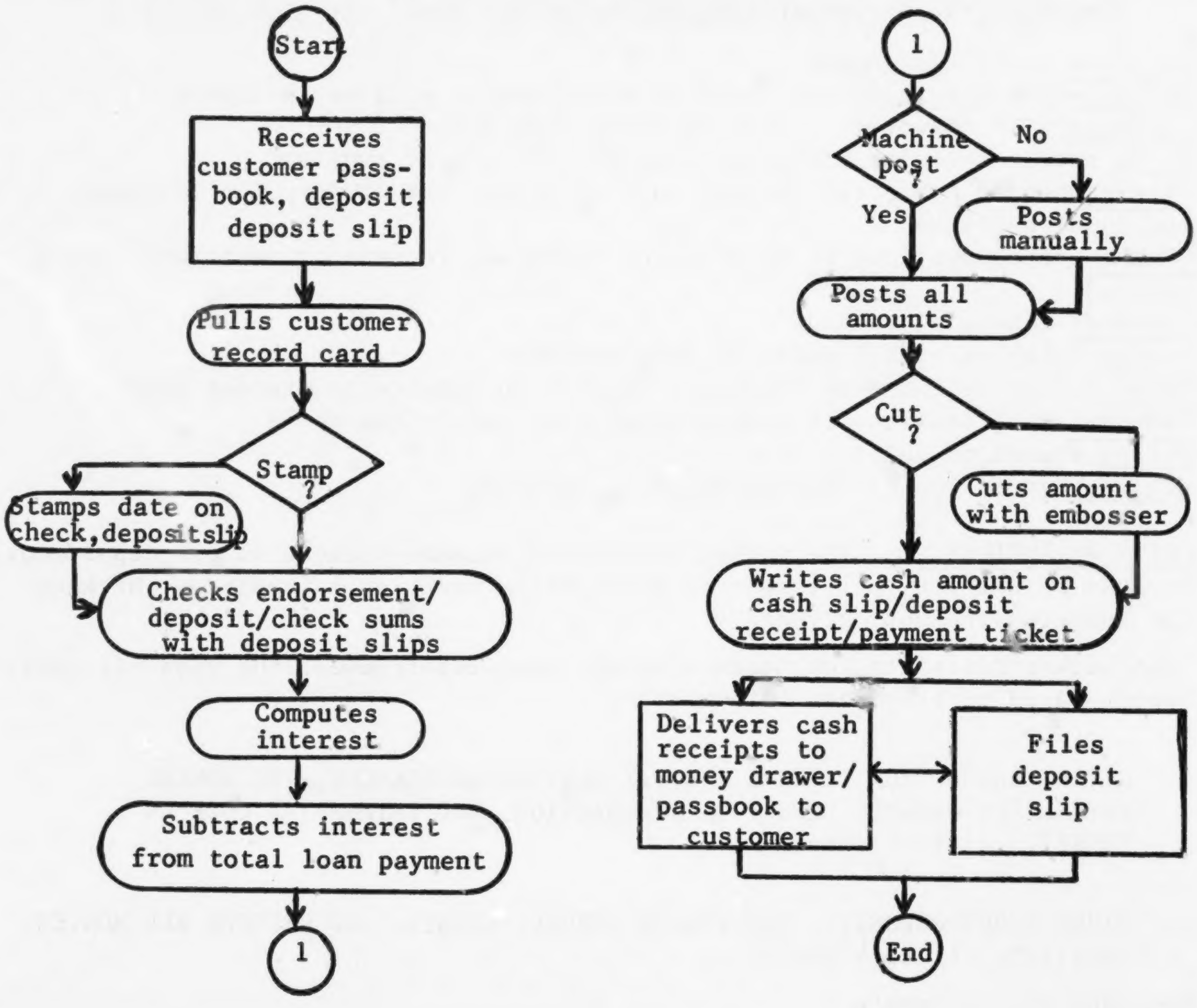
6. GIVEN NIGHT DEPOSITS, THE WORKER CHECKS, COUNTS, AND RECORDS ALL MONIES RECEIVED. (1 task sheet)

Receives night deposit
Records number of deposit bags, envelopes, numbers on recording sheet
Counts currency and coin
Checks deposit slip amounts with amounts of deposit/endorsement on checks
Runs deposit,receipt slip through receipt machine
Mails receipt slip to customer
Records amount of cash addition slip in teller machine

7. GIVEN COLLECTION RECEIPTS FOR UTILITY BILLS, THE WORKER PAYS UTILITY COMPANIES FOR BILLS PAID AT BANK. (1 task sheet)

Collects receipts for utility bills from tellers
Sorts receipts by company name
Totals receipts
Types bank money order for utility company
Mails money order to utility company

8. GIVEN A CUSTOMER, SAVINGS/LOAN BOOK, DEPOSIT, DEPOSIT SLIP, THE WORKER HANDLES RECEIPTS FOR CUSTOMER ACCOUNTS. (12 task sheets)


Start
Receives customer passbook, deposit, deposit slip
Pulls customer record card
Stamp ?
Stamps date on check, deposit slip
Checks endorsement/ deposit/check sums with deposit slips
Computes interest
Subtracts interest from total loan payment
1
1
Machine post ?
No
Yes
Posts manually
Posts all amounts
Cut ?
Cuts amount with embosser
Writes cash amount on cash slip/deposit receipt/payment ticket
Delivers cash receipts to money drawer/ passbook to customer
Files deposit slip
End

SUPPLEMENTARY STEP: Obtains cash box from vault

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Passbooks	Accuracy
Stamp	Deposit checks, slips	Checking
Posting machine	Negotiable instruments	Filing
Tellers machine	Customer record	
Files		
Check embossing machine		

Note: Hardware, Software, Educational Cues and Reported Criteria refer to goals 8 and 9.

REPORTED CRITERIA: "Accuracy in counting cash is a must; Adherence to rules concerning security; Careful checking for forgeries; Count cash quickly and accurately; All deposits or withdrawals properly recorded and correct, change given in order to balance at end of the day; Remain alert; Losses suffered by bank for errors are noted on tellers sheet"

9. GIVEN A CUSTOMER, SAVINGS/LOAN BOOK, THE WORKER HANDLES DISBURSEMENTS FOR CUSTOMER ACCOUNTS. (12 task sheets)

Receives customer, passbook, check/foreign money
Checks endorsement/bank on which drawn/savings account/identification
Determines if check is good
Stamps negotiable instrument with date
Counts cash for check/negotiable instrument amount
Records withdrawal on teller machine, on savings record
Delivers cash to customer
Files check/withdrawal slips/negotiable instruments

SUPPLEMENTARY STEP: Advises customer/contacts supervisor if check invalid

10. GIVEN SECURITIES, FORMS, PRINTOUTS, AND ADDING MACHINE TAPES, THE WORKER CHECKS SECURITIES AND AMOUNTS. (4 task sheets)

Receives securities, forms, adding machine tapes/printouts of previous day's transactions/comparisons (individual forms on each trade)
Obtains original issue book
Runs tape on security amounts
Checks tape totals/printouts for errors/forms for completion and corrections/ transactions with issue book
Types list of accounts in error
Initials tapes,forms
Stamps comparisons "okay" if correct
Distributes forms
Delivers tapes, listing of securities/comparisons to another worker
Files printout by company name

11. GIVEN CLAIM FORMS OR MEMOS, THE WORKER RESEARCHES CLAIM IN REGARD TO TRANSFER, TRADE, OR EXCHANGE OF SECURITIES. (2 task sheets)

Receives claim forms/memo indicating exchange
Checks number of shares of stock/memo information
Codes claim information
Computes dividend
Checks all balances computed
Completes forms
Delivers forms to supervisor

12. GIVEN FINAL DAILY SHEETS FROM BROKERS, THE WORKER RECORDS, RUNS TAPES ON TOTALS, AND COMPILES SUMMARY SHEETS ON ALL EXCHANGES. (2 task sheets)

13. GIVEN COUNTER TICKETS FOR SECURITIES, THE WORKER CHECKS TICKET NUMBERS AND ISSUED RECEIPTS TO MESSENGER. (1 task sheet)

14. GIVEN SECURITIES AND DELIVERY BILLS, THE WORKER COUNTS AND TOTALS ALL SECURITIES AMOUNTS. (1 task sheet)

15. GIVEN STOCKS TO BE DELIVERED TO ANOTHER BROKER, THE WORKER PROCESSES STOCK TRANSACTIONS. (1 task sheet)

Receives stock
Verifies stocks
Assigns number to stock
Calls broker
Informs broker of names of stock and pertinent data
Verifies authorizations,checks
Delivers stock to messenger
Receives receipt
Records transactions
Types collection letter
Mails collection letter to correspondent bank

16. GIVEN BUY AND SELL ORDERS, THE WORKER PROCESSES THE SETTLEMENT OF STOCK TRANSACTIONS. (2 task sheets)

Receives buy/sell orders
Verifies description of securities for goods delivery form
Completes instructions
Sends instructions, cash/check to broker
Completes credit,delivery instructions
Sends instructions to another bank
Debits bank branch
Records debit, credit entries
Types advice/confirmation forms
Photocopies advice copies
Sends advice to trust branches for balancing, to Data Processing/confirmation forms to concerned parties
Delivers stock by messenger, registered mail/armored transport

17. GIVEN INVOICES ON BUYING AND SELLING OF MUNICIPAL BONDS, THE WORKER PROCESSES TRADING OF SECURITIES. (1 task sheet)

Receives invoices
Checks invoices figures
Types forms from invoice information
Distributes forms to Operations and trust auditor
Files copy of form
Receives trust officer's check from Operations/security from Collections
Delivers check to Collection/securities to co-worker
Files copy of forms

18. GIVEN UNISSUED SAVINGS BONDS, THE WORKER FILLS REQUISITION ORDERS FOR SAVINGS BONDS DAILY. (1 task sheet)

Obtains unissued savings bonds
Signs for amount of bonds obtained
Receives requisition, shipping sheet
Locates on requisition number, denomination of bonds requested
Records requisition number, denomination, serial number of bonds shipped
Obtains accuracy verification of requisition, bonds
Packages, weighs requisitions, bonds, packages
Returns package to vault

19. GIVEN CALL BONDS AND A NATIONAL PUBLICATION, THE WORKER PROCESSES ALL CALL BONDS. (1 task sheet)

Receives national publication, call bonds
Compares bonds listed in publication with bonds bank owns
Writes on note pad security number of bonds bank owns listed in publication
Sorts bonds
Composes, types letter of bonds description
Proofreads letter
Mails letter registered mail
Types two sales tickets
Delivers original sales tickets, money to Operations
Attaches copy of letter to copy of sales ticket
Files letter and sales ticket/national publication

20. GIVEN A CUSTOMER REQUEST FOR THE PURCHASE OF A GOVERNMENT BOND, THE WORKER SELLS GOVERNMENT BONDS. (1 task sheet)

Receives request to purchase Government bond
Types bonds
Stamps bond copies with bank number, name
Delivers original bond to customer
Records sales in folder
Types report on purchase
Mails report to state capital
Credits bank's account for money
Files copy of bond

21. GIVEN OUTGOING CASH LETTERS IN FOREIGN CURRENCY FROM OWN BANK OFFICERS AND DOMESTIC CORRESPONDENT BANKS, THE WORKER PROCESSES OUTGOING CASH LETTERS FOR IMMEDIATE CREDIT TO ACCOUNTS. (1 task sheet)

Receives cash letters
Verifies checks and currency exchange rates
Types deposit tickets
Runs tape for credit entries/debit entries
Types total on credit entry letter/debit entry letter
Sends debit and credit portions of deposit tickets to Data Processing
Batches checks for some currency
Verifies foreign, local currency amounts on batch sheet
Records foreign, local currency amounts, conversion rate on cash letter form
Signs all checks
Photographs checks
Mails checks with cash letter to correspondent banks
Files copy of cash letter
Sends batch sheet to Bookkeeping

22. GIVEN A DEED OR DEATH CERTIFICATE, THE WORKER ADDS/DELETES A NAME FROM A LOAN FILE, BANK RECORDS, AND INSURANCE POLICIES. (1 task sheet)

23. GIVEN INCOMING CASH LETTERS FOR FOREIGN CORRESPONDENT BANKS, THE WORKER PROCESSES THE CASH LETTERS FOR IMMEDIATE CREDIT TO THEIR ACCOUNTS. (1 task sheet)

Receives cash letters
Sorts cash letters
Pulls ledger sheets
Posts correspondent bank's reference number, amount shown on letter
Verifies total on letter
Runs letters, checks through microfilmer
Attaches tapes to checks, duplicate to letters
Types deposit ticket for each remittance letter
Sorts credit tickets
Sends credit tickets to correspondent bank
Files copy of credit ticket
Records totals on credit entry letter
Sends debit portion of letters to foreign bank bookkeeper
Types interoffice debit entry letter for each total amount of checks
Sends credit portion of letters to Transit
Runs tape (debit, credit) on interoffice entry letters for balancing
Sends entry letters to Bookkeeping

24. GIVEN A REQUEST FOR A LOAN, THE WORKER PROCESSES LOAN APPLICATIONS. (6 task sheets)

Receives loan customer
Interviews customer
Informs customer of monthly payments
Requests customer complete application
Receives completed application/notes/chattel mortgages
Obtains credit approval on loan or
Types reject card, places card, application in basket
Obtains coupon payment books if loan approved
Types mortgage forms for file
Computes net worth of applicant/percentage of loan to value of loan
Totals monthly mortgage payments
Checks computations/documents for accuracy
Compiles file on applicant
Records application, amount
Holds all mortgage applications for additional data
Files loan application

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Loan applications	Checking
Adding machine (10-key)	Notes	Communication skills
Files	Chattel mortgages	Computational skills
	Coupon payment books	Accuracy
	FHA payments book	Filing/Typing

REPORTED CRITERIA: "Able to organize work efficiently; Must establish priorities; Proficient in typing, adding machine calculating, math, arithmetic skills; General knowledge of mortgages is advantageous"

25. GIVEN THE BOOKKEEPING RESPONSIBILITIES OF A SMALL BANK, THE WORKER PERFORMS THE PAYMENT AND BOOKKEEPING DUTIES. (1 task sheet)

Receives payments
Computes interest, principle
Posts accounts
Types debit, credit entry letters, computation tickets
Balances daily work
Sends daily work to Data Processing/bills, past-due notices to customer
Maintains files
Closes loans

26. GIVEN ACCOUNT CARDS, THE WORKER TAKES A TRIAL BALANCE ON ALL INSTALLMENT LOANS. (1 task sheet)

Receives account cards
Sorts loan cards by due date
Adds balances on each card
Verifies totals
Obtains approval of supervisor
Files report with abstract

27. GIVEN A REQUEST FOR BENEFICIARY STATEMENT INDICATING A PROSPECTIVE BUYER, THE WORKER PROCESSES ASSUMPTIONS OF LOANS. (1 task sheet)

Receives request for beneficiary statement
Types beneficiary statement
Obtains approval of statement/completion of forms/loan committee approval
Types approval letter
Receives closing papers from Escrow
Processes payments, loan fees, fire insurance data
Sends completed loan file to Loan Accounting for further processing

28. GIVEN PAYMENTS, LOAN PAYMENT SHEETS, JOURNALS, AND OTHER SOURCE DOCUMENTS, THE WORKER POSTS ENTRIES TO THE LEDGER. (13 task sheets)

ACQUISITION

RECEIVES
  payments from teller/loan payment sheets/loan slips/journals/batches of checks/check, loan payment books/deposits, deposit slips

PROCESS

SORTS
  payment coupons by type of loan/new, old bans alphabetically/withdrawal slips numerically
CHECKS
  account numbers/name of account/previous balances
Totals
  groups of payments/deposit tickets/withdrawal slips
Pulls
  account cards/loan payment sheet/statement sheet/ledger cards

POSTS

coupon totals with bookkeeping machine/withdrawals/deposits/loan payments/correcting entries

RECORDS

real estate, installment loan payments on monthly payment sheet/loan payments in loan payment books/interest due on accrual sheet/recap sheet totals/amount, bank of checks

COMPUTES

ledger totals/daily payments received/posting machine totals

Verifies

ledger totals/posting machine totals with proof machine operator/total of group payments with teller totals

CUPLICATES

all checks and deposit slips

DISPOSITION

FILES

account cards/loan payment sheets/checks/journals, cards/ledger cards/bookkeeping machine master tape

Sends

closed account ledgers to Filing/checks, tapes for further processing to another worker

DELIVERS

loan payment book to customer/deposit slip to another worker

SUPPLEMENTARY STEP: Cancels checks written on checking accounts with cancelling machine

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Calculator	Payments	Checking
Bookkeeping machine	Loan payment sheets	Accuracy
Duplicator	Loan slips	Filing
Files	Journals	
	Deposit slips	

REPORTED CRITERIA: "Work must be done daily; Great deal of concentration and accuracy required; Good legible handwriting; Perseverence in seeking solution to errors and analytical mind to guess where errors might occur; Ability to scan numbers quickly and accurately; High degree of prolonged alertness; General knowledge of work performed; Work must be balanced before leaving for lunch or at the end of day"

CRITICAL INCIDENTS: "The worker sometimes posts the incorrect account numbers because of the general rush and her lack of concentration."

"The worker neglected to post entries of a previous date and proceeded with posting of current transactions. She had not checked balances or she would have caught the error."

29. GIVEN SOURCE DOCUMENTS SUCH AS STOCKS AND BONDS, DEPOSIT SLIPS/ PASSBOOKS, THE WORKER RECORDS ITEMS. (18 task sheets)

ACQUISITION

RECEIVES
stocks, bonds/savings deposit slips/passbooks/conversion sheets/money/ record of sale of securities/deposits from tellers/overdrawn statements/ loan history cards/copy of all transfers/deposit slips, checks to be issued/levy,attachment/overdraft report/daily reports/batch of stubs from transactions

PROCESS

CHECKS
endorsement

Stamps
check/levy, attachment with teller number, date

Writes
amount of note on journal sheet/charges for out-of-town checks, exchange charges on deposit slip/customer name, overdraft amount in log

Runs tape
on stocks and bonds/on insurance premium, interest, principle/on holdover listings

SORTS, Counts
cash

CHECKS
tapes with securities

Searches
record sheets for account information on levy or attachment

Pulls
overdraft check for each check listed in overdraft report

RECORDS
totals of teller report on summary sheet/deposits/total on recap sheet/ breakdown figures from loan history in book/transfers, deposits, checks to be issued/check, savings deposit on teller machine/amount of checks to be deposited on deposit slip/information on levy, attachment/account name, number, machine number, reference number, date of stub, amount on holdover form

TYPES
form letters to marshalls, IRS, customer regarding levy, attachment/ check return notice/report information on customer cards

Proofreads
typewritten materials

Runs tapes
on recap sheet columns/on checks, cash

Totals
savings deposit checks/deposit slips/daily overdraft

Verifies
totals/control sheet against computer totals

Obtains
teller stamp on deposit slip/signature of two officers on overdraft

Batches
deposit slips

DISPOSITION

MAILS
  letters regarding levy, attachment.
Places
  money in cash drawer
DELIVERS
  passbook to customer/journal sheet to Posting/teller's report to head teller/deposit slips to Proofing/return notices, check to Cashier
FILES
  deposit slips/report copies

HARDWARE

- Adding machine
- Teller machine
- Files
- Typewriter

SOFTWARE

- Stocks, bonds
- Deposit slips
- Passbooks
- Conversion sheets
- Cash, checks
- Levy/attachment
- Batches of stubs
- Daily reports
- Loan history cards
- Overdrawn statements

EDUCATIONAL CUES

- Accuracy
- Alertness
- Checking
- Computational skills
- Typing
- Filing

REPORTED CRITERIA: "Care in entering figures; Must be efficient; Polite to customers; Accurate data transferring"

30. GIVEN CUSTOMER REQUEST OR STOP-PAYMENT FORM, THE WORKER HANDLES ALL STOP PAYMENTS. (5 task sheets)

Receives call from customer/stop-payment form
Writes check number, amount, to whom payable on stop-payment card/customer name, account number, date on debit reversal form
Inquires if duplicate check will be written
Requests customer write letter confirming order
Records day, time of report on form, in book
Types stop payment/issue reversal form
Duplicates stop-payment form
Checks check register
Stamps confirmation on stop order
Files stop-payment card copy
Delivers stop-payment check, debit reversal form to supervisor/copies of stop-payment form to bank tellers

CRITICAL INCIDENT: "The worker paid a check because she carelessly overlooked a stop-payment card. Consequently, the bank acquired an old, crippled horse. The writer of the check had learned of the horse's condition and tried to stop payment. The horse now resides in a rented pasture."

31. GIVEN BAD CHECKS RECEIVED FROM CUSTOMER'S BANK, THE WORKER REVERSES LOAN PAYMENT ENTRIES. (1 task sheet)

Receives returned customer checks, charge slips indicating reason for check bouncing
Checks amount on check with charge slip
Locates customer's loan number
Writes customer's loan number on bad check
Posts loan number with posting machine
Checks posting list for loan payment information
Writes breakdown of loan payment (interest, principle)
Types returned check list
Checks breakdown totals
Delivers loan information cards, copy of list to supervisor/checks, copy of list to Loan Service

32. GIVEN ORAL/WRITTEN REQUEST, THE WORKER PROCESSES ESTATE SETTLEMENTS FOR CUSTOMERS. (3 task sheets)

ACQUISITION

RECEIVES
oral/written request
Obtains
file of deceased/description of deceased's real property/list of furniture, household goods, wearing apparel/death-date value of securities

PROCESS

SORTS
estate into real estate, furniture, household goods, wearing apparel, securities, miscellaneous
Writes
market value of securities (at date of death) on stock, bond value work sheet/schedule of net income/requisitions for checks to be written
COMPUTES
accrued interest on bonds/estate disbursements
RECORDS
accrued interest total of stocks, bond values work sheet/description of estate on inventory work sheet
Posts
value totals in ledger
Devises
plan of distribution
CHECKS
income taxes
RECEIVES
typewritten checks from typist
Obtains
approval of supervisor on schedule

DISPOSITION

DELIVERS
cash statement work sheet/checks/inventory work sheet to administrator of estate

SOFTWARE	EDUCATIONAL CUES	REPORTED CRITERIA:
Customer file	Checking	"Mathematical ability, legal terminology; Accuracy is a must in estate settlement procedures and full knowledge is necessary"
Securities	Accuracy	
Ledger		

33. GIVEN A REQUISITION FOR CURRENCY, THE WORKER PREPARES CURRENCY FOR SHIPPING ORDERS. (1 task sheet)

Receives request/requisition for currency
Writes information on payroll slip form
Totals amounts
Obtains currency from vault
Runs tape on amount of currency
Attaches tape to payroll slip
Files payroll slip
Places currency in bag with name of company

34. GIVEN COINS FROM THE FEDERAL RESERVE BANK DAILY, THE WORKER SORTS COINS. (2 task sheets)

Obtains currency from vault
Signs for number of bags, amount received
Places coins in coin-counter machine
Checks for bent, foreign, counterfeit, old coins, bills
Replaces bad coins
Sorts bills (fit, unfit)
Records coin and bill count
Places coins in bag
Ties bag
Wraps bills
Stamps packages of bills
Totals bad coins
Delivers bad coins to supervisor/finished bags to vault

35. GIVEN A REQUEST FOR CREDIT INFORMATION, THE WORKER COMPILES AND DELIVERS CREDIT INFORMATION TO PERSONS REQUESTING IT. (8 task sheets)

Receives request for credit/credit applications
Calls other departments for customer account information/credit bureau
Obtains customer file/credit information form
Writes credit information on note pad
Types credit information on form
Proofreads form
Attaches inquiry form to folder
Records callers' names in folder
Delivers credit information to customer
Sends application to Credit

HARDWARE	SOFTWARE	EDUCATIONAL CUES	REPORTED CRITERIA:
Typewriter	Credit application	Accuracy	"All information must be written/typed with highest degree of accuracy"
Telephone	Customer file	Typing	
	Credit information form	Communication skills	
	Inquiry form	Checking	

CRITICAL INCIDENT: "The worker did not take down the complete name of the client applying for credit. In checking his credit rating, she was given the credit information on another person with incomplete name reference she had asked for. The client's loan was turned down because of the error. The client subsequently went to another bank as he had never been refused credit before."

36. GIVEN THE RESPONSIBILITY FOR BRANCH BANK CASH, THE WORKER COUNTS AND DISTRIBUTES DAILY CASH TO TELLERS. (2 task sheets)

Estimates needed cash
Obtains needed cash from vault
Receives request for additional cash from teller
Verifies requests
Counts money
Delivers money to teller
Signs form recording exchange
Delivers copy of forms to teller

37. GIVEN COMPUTER INPUT/OUTPUT, THE WORKER MAINTAINS CONTROL ON INPUT/OUTPUT WORK FLOW BETWEEN CORPORATE TRUST AND DATA PROCESSING DEPARTMENT. (2 task sheets)

Receives input/output, lists of outputs
Checks output for completion/accuracy
Records input in log book
Calls to obtain output delayed
Informs Corporate Trust of delay reason
Delivers input to Data Processing/output to Corporate Trust

38. GIVEN DATA SHEETS, THE WORKER POSTS JOURNAL ENTRIES FOR PAYROLL. (1 task sheet)

Obtains data sheets/pre-punched cards/program control cards
Collates cards by code number
Punches account number and amount on cards
Verifies cards
Delivers cards to Accounting

39. GIVEN BATCHES OF CHECKS, THE WORKER PREPARES BATCHES FOR DATA PROCESSING. (1 task sheet)

Receives batches of checks
Checks account number, wrinkled checks, checks that do not belong to bank
Microfilms, computes, verifies all checks/totals
Delivers checks, computation sheet to Data Processing

40. GIVEN PAYMENT CARDS, CHECKS, AND DEPOSIT/WITHDRAWAL SLIPS, THE WORKER PROCESSES ITEMS FOR KEYPUNCHING. (4 task sheets)

Receives deposit/withdrawal slips, checks, payment cards
Sorts withdrawal, deposit slips
Writes customer account number on deposit slip
Microfilms deposit/withdrawal slips
Operates encoding machine printing account code on deposit slip
Computes total deposit slips/check totals
Checks computations, payment cards
Attaches adding machine tapes to deposit/withdrawal slips
Types form giving totals, deposit,withdrawal slips, bank number, date
Sends deposit, withdrawals/ payment card to Data Processing

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Deposit/withdrawal slips	Checking
Microfilmer	Checks	Accuracy
Typewriter	Payment cards	Typing
Encoding machine	Customer account card	Computational skills
	Adding machine tapes	

REPORTED CRITERIA: "Must have knowledge of savings account, withdrawal procedures"

41. GIVEN CHECKS, THE WORKER TYPES CASH LETTERS FOR CHECKS DRAWN ON BANK BUT CASHED ELSEWHERE FOR DATA PROCESSING. (1 task sheet)

Receives checks
Checks checks for missing account numbers
Records totals on debit, credit sheet
Codes checks with account number on coding machine
Micorfilms all checks
Places checks in box for Data Processing

42. GIVEN COMPUTER REJECTED DEBITS AND CREDITS, THE WORKER LOCATES, CORRECTS, AND DELIVERS ITEMS FOR FURTHER HANDLING. (2 task sheets)

Obtains daily journal sheet, balance report, savings total
Sorts deposits, withdrawals numerically
Scans savings total sheet for rejected items
Pulls rejected items
Locates error in rejected items
Corrects deposit, withdrawal with encoding machine
Sends rejection items to assistant manager for approval

43. GIVEN RETURNED CHECKS, THE WORKER NOTIFIES CUSTOMERS THAT PAYMENTS MADE BY BANK TO INSURANCE COMPANY HAVE BEEN RETURNED. (1 task sheet)

CRITICAL INCIDENT: The worker failed to notify an especially good customer that his insurance had expired. The customer's car was stolen; and rather than lose the customer, the bank absorbed a $1,700 loss.

44. GIVEN CANCELLATION NOTICES, THE WORKER TYPES INSURANCE CANCELLATION LETTERS. (1 task sheet)

Obtains cancellation notices, balance sheet
Writes insurance cost on customer insurance card
Types form letter on cancellation
Obtains signature of supervisor
Mails letter

45. GIVEN CUSTOMER FILE, THE WORKER APPLIES FOR VENDOR'S SINGLE INTEREST (VSI) INSURANCE COVERAGE. (2 task sheets)

Obtains customer file
Locates correspondence for evidence of VSI insurance coverage
Obtains officer's approval for VSI coverage
Types insurance information on VSI form
Proofreads form
Mails letter
Files copy of letter
Receives policies, invoices for coverage
Checks amount of premium
Types customer personal data, premium amount on correction sheet forms
Proofreads forms
Attaches copy of correction sheet to customer insurance card
Delivers correction sheet, slips to supervisor
Files policies, invoices

46. GIVEN AUTO INSURANCE POLICIES, THE WORKER VERIFIES INSURANCE COVERAGE AND REGISTRATION OF THE BANK AS LEGAL OWNER OF ALL AUTO INSTALLMENT LOANS.(1 task sheet)

Receives policies
Verifies for correct auto, loss payable clause
Informs employer when evidence of coverage is not received
Calls insurance agent to verify coverage
Types auto registration, transfer forms
Mails registration, transfer forms to Department of Motor Vehicles
Receives and verifies registration
Files policy, registration

47. GIVEN CHECKS, SAVINGS AND WITHDRAWAL SLIPS, BALANCE SHEETS, AND OTHER SOURCE DOCUMENTS, THE WORKER CHECKS ITEMS AND CORRECTS ERRORS. (12 task sheets)

ACQUISITION

RECEIVES

computerized transaction journal/checks paid/savings, withdrawal slips/hold (check) cards/computer listing of savings, withdrawal slips/out-of-state check endorsements/lists of checks on customer accounts/checks, balance sheets with incorrect numbers/exception list on check writing errors/mail deposits/deposit correction tickets/unidentified checks/incomplete checks/cancelled checks

PROCESS

Pulls
customer card
SORTS
savings, withdrawal slips
CHECKS
hold cards with customer account/accounts for stop payments/checks for date, signature, endorsement/savings, withdrawal slips with computer listing/out-of-state checks for home bank/customer number with check number/check, payment amount/deposit amount received with deposit slip/name on unidentified check/name, address of customer/checks for missing information/cancelled checks for errors to be corrected
Stamps
deposit slip/back of check if no signature/endorsement on cancelled checks
DUPLICATES
(photocopies) deposit correction ticket/(Microfilms) incomplete checks
RECORDS
hold cards on trial balance sheet/stop payments, removal of stop payments/weekly listing of checks issued by customer
Writes
standard reversal forms for incorrectly cashed checks/substitution slip for correction/credit,debit slip to correct error/new cards for stop payments/total savings, withdrawals on paper/ return item form to out-of-state bank to which check belongs/correct number on check/account number on unidentified check
TYPES
reverse entry form for out-of-state missent checks/bank-owes, customer-owes letter on incorrectly cashed check
Totals
control register of all checks processed/amounts of checks misnumbered/debit, credit of deposit correction

DISPOSITION

FILES
hold cards numerically/stop cards/savings, withdrawal slips/savings, withdrawal computer listing/copy of deposit correction/completed checks
DELIVERS
unidentified checks to check clerk/questionable checks to supervisor/savings,withdrawal paper to Posting/correctly numbered checks to Proofing/deposit slip, check to teller
MAILS
return item form and out-of-state check

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Hold cards	Computational skills
Typewriter	Checks	Typing, Filing
Files	Computer listings	Checking, Accuracy

REPORTED CRITERIA: "A great need for alertness; Accurate examination; Typing speed secondary to accuracy; Should be able to understand debit and credit; Must check savings, withdrawal slips with computer listing daily."

48. GIVEN SOURCE DOCUMENTS SUCH AS DEPOSIT SLIPS, ADDING MACHINE TAPES, AND ADVICES, THE WORKER PERFORMS ROUTINE CHECK ON ITEMS. (15 task sheets)

ACQUISITION

RECEIVES
checks/deposit slips/cash tickets/adding machine tape/a paid-in-full ledger/new account computer printed stickers/change of address slips/ loan payment books/additional deposit sheets/request for verification of receipt for debit, credit amounts from other banks/advices/oral information stating withdrawal, deposit from supervisor

PROCESS

Pulls
customer ledger card/supporting documents on receipt of debits, credits from other banks

Counts
checks

CHECKS
checks for errors/for checks drawn over $500/checks for missing information/stop-payment accounts/bill register with customer account/deposit amount/past payments, payment record/if reversing entry made/advices/ checks for current date/check amounts with adding machine tape/name, sticker data with change of address slips/date of loan payment/monthly loan payment/accuracy of late charge/codes on loan payment book/account numbers

COMPUTES
all check totals/deposit required

SORTS
out checks in error/change of address slips

CALLS
customer for approval on unauthorized signatures

Writes
charges to drawee bank on advice/deposit, withdrawal on trust account/ approval on correct checks/okayed by phone on checks approved/deposit slip for checks not properly endorsed

Stamps
"not approved" on unapproved checks

Attaches
deposit slip to unapproved check/new account stickers to new cards/ change-of-address sticker to old card

RECORDS
rating, dates paid/new deposits on form

DISPOSITION

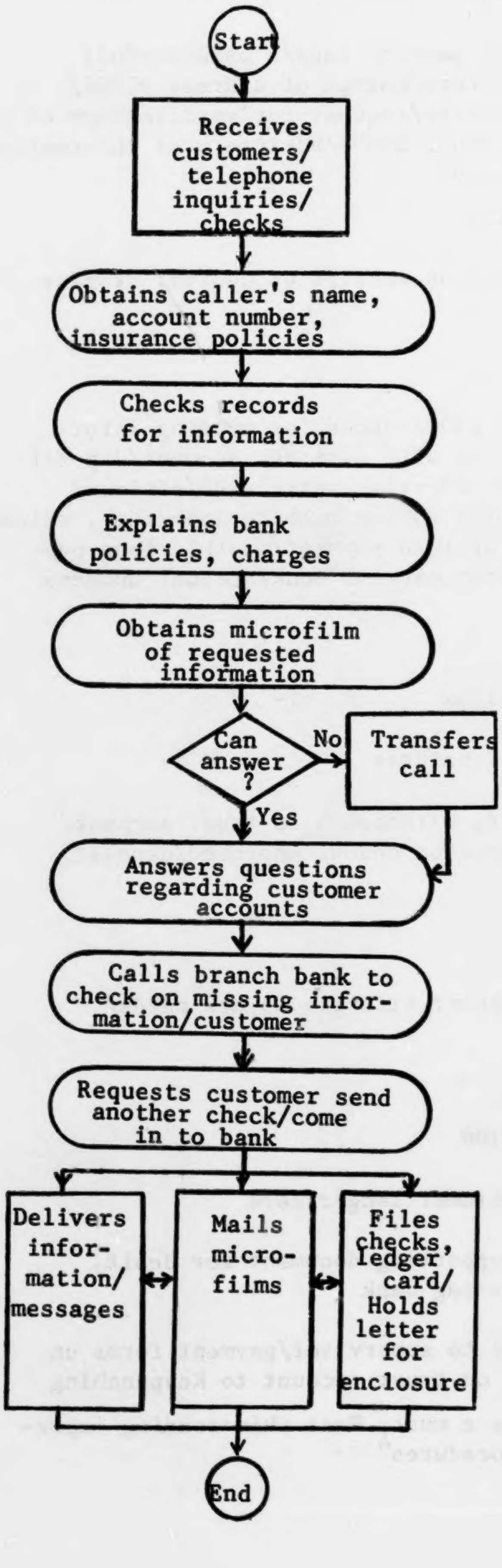
FILES
reviewed checks/copy of deposit slip/customer ledger card

MAILS
loan payment book to customer/copy of supporting document for debit, credit from other banks/advices to endorsing bank

DELIVERS
unauthorized signature checks, forgeries to supervisor/payment forms on additional deposits/deposit, withdrawal on trust account to Keypunching

REPORTED CRITERIA: "Accuracy in filing is a must; Fast skim reading important; Familiarity with bank filing and procedures"

49. GIVEN CUSTOMERS, TELEPHONE INQUIRIES, OR RETURNED CHECKS, THE WORKER HANDLES OVER-THE-COUNTER REQUESTS AND INQUIRIES REGARDING CUSTOMER ACCOUNTS AND BANK POLICIES. (26 task sheets)


Start
Receives customers/ telephone inquiries/ checks
Obtains caller's name, account number, insurance policies
Checks records for information
Explains bank policies, charges
Obtains microfilm of requested information
Can answer ?
No
Transfers call
Yes
Answers questions regarding customer accounts
Calls branch bank to check on missing information/customer
Requests customer send another check/come in to bank
Delivers information/ messages
Mails microfilms
Files checks, ledger card/ Holds letter for enclosure
End

ACQUISITION

RECEIVES
  customer/telephone request, inquiry/ call from loan officer/returned checks
Obtains
  caller's name, account number/date, amount of last deposit/insurance policies/customer balance

PROCESS

Pulls
  customer ledger card/customer's cancelled checks
CHECKS
  records for information
Explains
  bank policy/charges
Obtains
  micorfilm of requested information
(Answers)
  questions on customer's account
CALLS
  branch bank to check on missing information/customer whose check was returned/other departments in bank regarding problems
Requests
  customer send another check, come in to bank

DISPOSITION

DELIVERS
  requested information/debit sheet on loans to Accounting/messages
FILES
  customer ledger card/customer cancelled checks
Holds
  letter missing enclosure
MAILS
  microfilm of requested information to person requesting it

HARDWARE	EDUCATIONAL CUES
Telephone	Coding
Files	Courtesy
Microfilmer	Promptness
SOFTWARE	Communication skills
Insurance policies	Alertness
Customer ledger card	Filing
Cancelled checks	

REPORTED CRITERIA: "Must be able to operate motorized files; 100 per cent accuracy in information delivered; Knowledge of coding; Pressure not to keep customer waiting; Familiar with bank policy and insurance information; Great deal of discretion required in how much information to give customer; High degree of decision making; Ability to cope with many different situations"

50. GIVEN A TENTATIVE SCHEDULE FOR PAYROLL, THE WORKER COMPILES AND TYPES CUSTOMER PAYROLL SCHEDULE. (1 task sheets)

Receives tentative schedule for payroll
Compiles yearly schedule of due dates, preparation dates, other pertinent information
Types, Duplicates payroll schedule
Obtains approval of payroll schedule by customer
Sends payroll schedule to Payroll Operations
Types payroll schedule with any changes noted, approved
Duplicates revised payroll schedule
Delivers copy of revised schedule to customer, Payroll Operations

51. GIVEN A REQUEST, THE WORKER TRACES ERRORS FOR LARGE CORPORATIONS. (1 task sheet)

Receives request to trace errors from large corporation
Pulls records applicable to error, microfilms of checks
Checks records with microfilms
Determines where loss of money occured
Composes letter of explanation when error is found
Delivers letter to typist

52. GIVEN CHANGE OF ADDRESSES OR NEW ACCOUNT INFORMATION, THE WORKER UPDATES THE CENTRAL INDEX FILES. (4 task sheets)

Receives change of address forms/new accounts information/deletion list
Pulls customer central information card/signature cards
Draws line through old address
Writes new address below old address
Types list of changes/change-of-address forms for new customers/mailing labels for new accounts
Attaches new label to file folder
Stamps date on cards deleted from files
Files deleted cards in inactive file
Sends change-of-address forms to Loan/Accounting

53. GIVEN DICTATION, APPLICATIONS, COMPUTER LISTINGS, AND OTHER SOURCE DOCUMENTS, THE WORKER TYPES INFORMATION ON FORMS, CARDS, OR LETTER HEADS. (17 task sheets)

ACQUISITION

RECEIVES
customer/request form from coders/dictation/mortgage application, credit files/mortgage information/list of newly married depositors/overdraft journal/insufficient funds, overdraft checks, computer listing/new account information, signature cards/ledger cards, forms/new loans/signed loan note/request to follow-up past-due customer accounts

PROCESS

- CHECKS
  - information received/overdrafts
- Explains
  - types of accounts
- Determines
  - type of account which suits customer needs best
- COMPUTES
  - overdraft charges/total overdrafts/advice totals
- TYPES
  - signature card/passbook/deposit slip/form letter/dictated letter/commitment form on mortgage/form letter to newly married depositors/overdraft form/check-return notices/analysis card, index cards with customer data/code number, check amount for branch bank/security loan form for new loan/details of new loan on form/loan payment sheet/loan note ticklers for file/account of reason for overdue account
- Proofreads
  - all typewritten materials
- Obtains
  - customer signature on signature card/deposit/signature on letters
- Counts
  - money for deposit
- Writes
  - credit ticket form/insufficient funds total on computer listing/check, vouchers for loan
- COMPILES
  - folder for new accounts

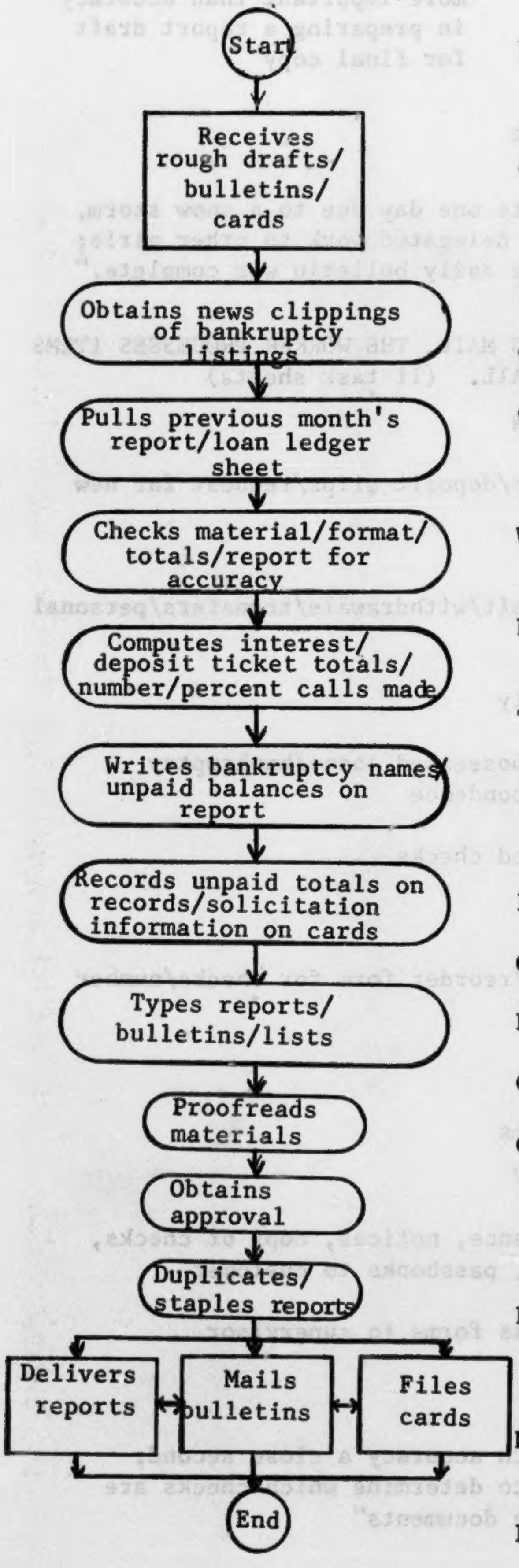
DISPOSITION

- DELIVERS
  - ledger cards, form to supervisor/advices, adding machine tapes to supervisor/credit ticket form to general ledger clerk/adding machine tape of overdraft charges to proof-machine operator/check return notice to assistant cashier/deposit, deposit slip to Posting/passbook to customer/mortgage, credit files to real estate officer
- Distributes
  - copies of commitment to attorney/realtor/auditor
- MAILS
  - form letters/dictated letters/marriage letters/copy of overdraft form to customer/check-return notice to customer/security loan form to county clerk/overdue-account letter to customer
- FILES
  - copy of form letter/copy of dictated letter/copy of commitment/copy of loan detail sheet/loan ticklers

SUPPLEMENTARY STEP: Calls customer to remind of past-due account

HARDWARE	EDUCATIONAL CUES	REPORTED CRITERIA
Transcribing machine	Shorthand, Typing	"Correct punctuation, grammar necessary; Average typing ability; Good knowledge of savings, loan institutions; Ability to handle customers tactfully, patiently"
Typewriter	Technical vocabulary	
Adding machine	Checking, Filing	
Files	Computational skills	

54. GIVEN ROUGH DRAFTS AND LISTS, THE WORKER COMPILES AND TYPES REPORTS AND BULLETINS. (14 task sheets)


Start
Receives rough drafts/ bulletins/ cards
Obtains news clippings of bankruptcy listings
Pulls previous month's report/loan ledger sheet
Checks material/format/ totals/report for accuracy
Computes interest/ deposit ticket totals/ number/percent calls made
Writes bankruptcy names unpaid balances on report
Records unpaid totals on records/solicitation information on cards
Types reports/ bulletins/lists
Proofreads materials
Obtains approval
Duplicates/ staples reports
Delivers reports
Mails bulletins
Files cards
End

ACQUISITION

RECEIVES
report information/rough drafts/new check, savings accounts listing/dealers payment reports/solicitation cards/bulletins

Obtains
clippings of bankruptcy listings from newspaper

PROCESS

Pulls
previous month's report/loan ledger sheets

CHECKS
material, format/totals/report for accuracy

COMPUTES
interest/deposit ticket totals/number of calls made per week for solicitation report/ percent of calls made

Writes
unpaid balances on report/bankruptcy names in bankruptcy book

RECORDS
unpaid totals on installment loan records/ information on solicitation cards

TYPES
report/check, savings account report/entry tickets crediting dealers trust account for amounts due/entry tickets to pay dealer excess due/buttetins/new accounts on bulletin/bankruptcy list

Proofreads
all typewritten materials

Obtains
approval of bulletins

DUPLICATES
report/solicitation report/bulletins

Collates, Staples
reports/bulletins

CALLS
messenger for pick up of report/dealer to request check when trust funds are insufficient to pay amounts due

DISPOSITION

DELIVERS
report to bookkeeper, employees, author/ new check, savings account list to bank president

MAILS
new checking, savings account lists to branch offices/other personnel

FILES
solicitation cards

HARDWARE

Adding machine (10-key)
Typewriter
Duplicator
Telephone
Files

EDUCATIONAL CUES

Accuracy
Typing
Filing
Checking
Technical language

REPORTED CRITERIA: "Speed is more important than accuracy in preparing a report draft for final copy"

CRITICAL INCIDENT: "The supervisor was late one day due to a snow storm, and the worker took control of the office, delegated work to other girls; and by the time the supervisor arrived, the daily bulletin was complete."

55. GIVEN BANK FORMS, CHECKS, AND INCOMING MAIL, THE WORKER PROCESSES ITEMS FOR MAILING AND DISTRIBUTES INCOMING MAIL. (11 task sheets)

ACQUISITION

RECEIVES
computer printout/mail/statements, checks/deposit slips/request for new checks/name, address forms

PROCESS

SORTS
mail according to savings, checking deposit/withdrawals/transfers/personal from business mail
Opens
mail with automatic letter opener/manually
Pulls
notices addressed to deceased persons/repossessed loans/bankruptcy paid notices/customer file/checks,correspondence
CHECKS
checks with statement received/for damaged checks
OPERATES
proof machine on checks, deposit slips
Writes
microfilm request form for missing checks/reorder form for checks/number of microfilm copies of checks requested
RECORDS
requests received
TYPES
addresses on envelopes/name, address forms

DISPOSITION

MAILS
check reorder form to printer/correspondence, notices, copy of checks, statements to customers/deposit receipts, passbooks to customer
DELIVERS
mail for sorting/checks to Sorting/address forms to supervisor
Distributes
mail to various departments

REPORTED CRITERIA: "Speed is paramount with accuracy a close second; Able to work under pressure of time; Able to determine which checks are damaged enough to warrant making substitute documents"

56. GIVEN ACCUMULATED BATCHES OF TRANSACTIONS, THE WORKER PICKS UP THE BATCHED TRANSACTIONS AND DELIVERS THEM TO THE VAULT AREA. (1 task sheet)

57. GIVEN CANCELLED CHECKS, ADVICES, RECAPS, AND OTHER SOURCE DOCUMENTS, THE WORKER DUPLICATES OR MICROFILMS FOR PERMANENT RECORDS. (9 task sheets)

ACQUISITION

RECEIVES
  cancelled checks/advices/request for copy of advice/ledger sheets, recap, summary sheets/bookkeeping report sheets/accounts listing/deposits

PROCESS

Pulls
  advices
CHECKS
  photocopy machine for proper date, microfilm setting/machine date settings
DUPLICATES
  cancelled checks/ledger sheets, summary sheets, recaps/bookkeeping reports
Collates
  reports
(Microfilms)
  all checks/deposits
RECORDS
  information on advices over $1,000/count on microfilmer/dates of filming, duplicating
Stamps
  "paid" on checks from this bank

DISPOSITION

DELIVERS
  originals to Accounting/copies to Error and Correcting
Distributes
  bookkeeping reports to other departments
FILES
  cancelled checks/copy of duplicated materials

REPORTED CRITERIA: "Must remain alert while filming checks; If not careful, could cause a microfilm jam; All documents must be microfilmed; Checks must not stick together as there would be no way to correct error"

58. GIVEN ACCOUNT FORMS AND CHECKS, THE WORKER SORTS ITEMS FOR FURTHER PROCESSING. (6 task sheets)

Receives account forms/checks
Checks checks for completeness
Sorts debits, credits/account forms into closed, new accounts, according to type of account, to office, to company, by individual customer/closed accounts out/checks by company branches/payroll checks by machine
(Removes) incomplete checks
Provides substitute documents for damaged checks
Batches, Delivers checks
Files damaged checks

59. GIVEN A REQUEST, THE WORKER HANDLES RENTAL AND OPENING OF SAFE DEPOSIT BOXES. (2 task sheets)

Receives customer request to rent safe deposit box/payment
Completes safe deposit box forms, cards with customer data
Writes cash receipt form for payment/check account debit
Delivers envelope of box/keys to customers
Requests customer sign name on envelope
Explains safe deposit box procedures
Records transaction
Files copy of signature card/entrance card
Receives customer visit to safe deposit box
Obtains box number
Pulls signature card
Stamps date, time on internal card with time-punch machine
Obtains customer signature on entrance card
Compares signatures
Obtains master guard key
Unlocks box
Delivers box to customer
Relocks box with master guard key
Stamps date and time of leaving on entrance card
Files entrance/signature cards

60. GIVEN A REQUEST, THE WORKER SELLS SAVINGS CERTIFICATES. (1 task sheet)

Receives request for a savings certificate
Pulls signature card
Obtains officer's signature
Receives money for certificate
Delivers original of certificate to customer
Records account number on two copies of certificate/option, source of funds, owner of social security number
Stamps bank number on certificate
Records double-entry credit to show account credited for money
Files copy of savings certificate

61. GIVEN A REQUEST, THE WORKER REDEEMS SAVINGS CERTIFICATES. (1 task sheet)

Receives request to redeem savings certificate
Verifies savings certificate
Obtains customer signature on certificate
Records debit to accounts to be debited
Computes interest accumulated
Delivers cash, deposit to customer
Pulls bank copy of certificate
Stamps certificate with date redeemed, amount of certificate, interest paid, totals
Files redeemed certificate
Mails copy of certificate with debits to state capital

62. GIVEN A REQUEST, THE WORKER HANDLES TRAVELERS CHECKS FOR CUSTOMERS. (1 task sheet)

Receives customer application for travelers checks
Verifies application for signature and number
Collects money
Verifies amount of money
Delivers travelers checks to customer
Obtains cashiers check for amount owed company
Mails check to company
Records credit to bank for profit
Posts sale of travelers checks to ledger
Files copy of sale

63. GIVEN A REQUEST, THE WORKER HANDLES CHRISTMAS CLUB COUPONS FOR CUSTOMERS. (1 task sheet)

Obtains Christmas club coupons
Checks totals
Sorts coupons by dollar value, numerically
Lists customer account number, coupon number on adding machine tape
Counts number of coupons
Totals coupons
Delivers coupons, adding machine tapes to next employee

BANKING CRITICAL INCIDENTS

"The worker must code all deposits and checks when keypunching. The code need only be punched in once, and it is automatically punched on all other cards until changed. The worker was keypunching checks and entered the correct code. Then she proceeded to keypunch deposits but forgot to change the code. The deposits were posted as checks to the customers' accounts. The error was caught the same day but resulted in a lot of extra work for the worker and her coworkers."

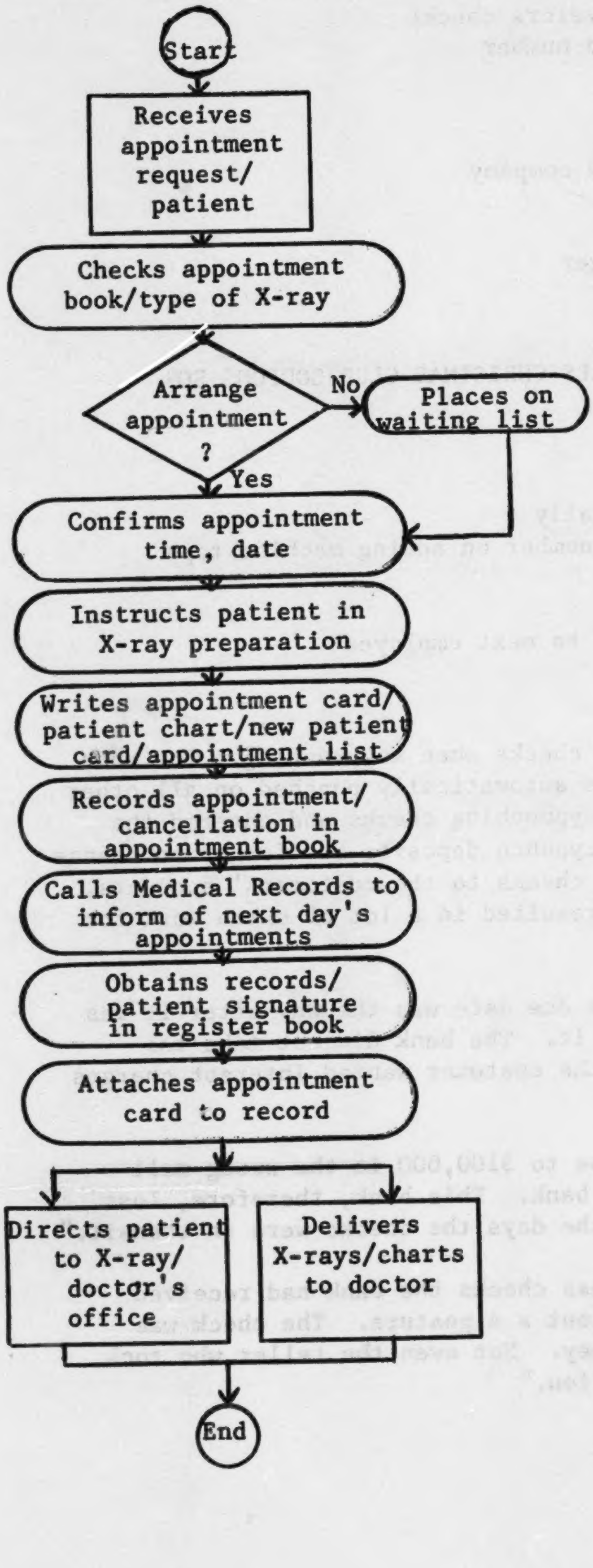
"The worker missorted a bank note. The due date was the day after it was received. It took two weeks to locate it. The bank did not make the presentation of the note on time, and the customer wanted interest charges for the overdue period of time."

"The worker placed checks totaling close to $100,000 in the wrong mail bin, and they were mailed to the wrong bank. This bank, therefore, lost 7½ percent interest on this money for the days the checks were in transit."

"While checking all personal and business checks the bank had received that day, the worker found a check without a signature. The check was written out for a very large sum of money. Not even the teller who took in the check caught the signature omission."

II MEDICAL

1. GIVEN A REQUEST FOR APPOINTMENT OR PATIENTS, THE WORKER SCHEDULES AND RECEIVES PATIENTS FOR MEDICAL APPOINTMENTS. (18 task sheets)


Start
Receives appointment request/ patient
Checks appointment book/type of X-ray
Arrange appointment ?
No
Places on waiting list
Yes
Confirms appointment time, date
Instructs patient in X-ray preparation
Writes appointment card/ patient chart/new patient card/appointment list
Records appointment/ cancellation in appointment book
Calls Medical Records to inform of next day's appointments
Obtains records/ patient signature in register book
Attaches appointment card to record
Directs patient to X-ray/ doctor's office
Delivers X-rays/charts to doctor
End

HARDWARE

Telephone
Intercom system
Files

SOFTWARE

Appointment book
Register book
Appointment card
Patient card

EDUCATIONAL CUES

Communication skills
Filing, alphabetical
Checking

REPORTED CRITERIA: "Legible handwriting; Pleasant, outgoing disposition; Tact, helpfulness; Cooperation; Clear diction; Patience; Good psychology in dealing with sick, difficult people; Conservation of time--avoid getting "case history" from patient; Moderate familiarity with types of X-ray, time necessary for each type of X-ray; Knowledge of special preparations for X-ray; Medical terminology"

SUPPLEMENTARY STEPS: If fever suspected, take and record temperature; Pages patient/doctor over intercom system; Sends copies of patient data to Chemistry, Hematology, X-ray, whole-body count, Receptionist; Puts dental bib on patient

2. GIVEN AN ORAL REQUEST, THE WORKER COORDINATES SCHEDULES FOR CONFERENCE ROOM USE BY EXTERNS. (1 task sheet)

3. GIVEN A LIST OF PATIENTS, THE WORKER ARRANGES WEEKLY CONFERENCES WITH DOCTOR. (1 task sheet)

Receives list of patients to attend conferences
Checks patient's chart
Calls/writes message to doctor of each patient to attend conference
Calls consultants for availability
Types list of patients
Calls X-ray department to request X-ray of each patient
Informs patient to attend conference
Delivers list, chart, X-ray to doctor
Sends patient to conference room as requested by doctor
Receives results of conference
Files patient chart

4. GIVEN PATIENTS, LISTS OF PATIENTS, OR MEDICAL RECORDS, THE WORKER CARRIES OUT PROCEDURES FOR HOSPITAL ADMISSION. (10 task sheets)

ACQUISITION

RECEIVES
  list of patients to be admitted/call that patient will arrive for admitting/ patient/medical chart/registration forms or cards
Obtains
  insurance information/records from patient

PROCESS

CHECKS
  bed availability/ID number/chart for completion/personal data/service required and list of doctors to determine floor to which patient should be assigned
COMPILES
  patient folder
CALLS
  Central Admitting for patient diagnosis
Stamps
  date on admitting papers
Writes
  payment arrangement on account card/registration form/room rate, number on room card/surgeon name on record/note to nurse, doctor that patient is arriving and diagnosis/personal data--marital status, religion, birth date
Discusses
  hospitalization/room accommodations/payment of bill before discharge
Obtains
  statement from patient if he can pay/signature of patient on insurance forms, agreement forms/patient personal data
Assigns
  number to patient

RECORDS
  room number in log/date on agreement form/method of payment
TYPES
  3 x 5 card listing patient name, hospital number
CALLS
  nurse/orderly to take patient to room

DISPOSITION

FILES
  patient card/chart
DELIVERS
  file to doctor/registration, account cards to control clerk
Directs
  patients to room

SUPPLEMENTARY STEPS: Photographs patient on admittance; Tags room card rack indicating room assigned; Requests deposit if patient has no insurance

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Hospital registration forms	Typing
Files		Filing
Telephone	Medical chart	Communication skills
Date stamp	List of patients	Checking

REPORTED CRITERIA: "Doctor and nurse notified immediately with available information on admitting patient; Clearly and correctly communicated messages; Must be organized and work quickly; Speed more important than accuracy; Able to obtain correct information especially when emergency; Must have calming effect on patients as most are nervous or ill; Knowledge of hospital policy"

5. GIVEN DISMISSAL SLIPS, MEDICAL CHARTS, OR ORAL INSTRUCTIONS FOR DISCHARGE, THE WORKER CARRIES OUT PROCEDURES FOR HOSPITAL DISCHARGE. (6 task sheets)

ACQUISITION

RECEIVES
  statistical report of hospital patients/doctor's oral instructions for discharge/dismissal slips/daily medical charts of patients to be discharged
Obtains
  copy of discharge progress form/patient folder/payment/summary report/ address cards/case histories

PROCESS

Stamps
  date on medical charts
CHECKS
  doctor's summary of patient care/completion of chart/chart coding/case history/ward number
COMPUTES
  amount due
TYPES
  discharge report form letter/discharge or transfer summaries

Proofreads
  letters/typewritten items
Writes
  doctor's signature on discharge form letter/clearance slip for patient's personal belongings/receipt for payment
Obtains
  discharge signatures for discharge/forwarding address of patients
RECORDS
  date of completion and destination

DISPOSITION

DELIVERS
  dismissal slip to floor nurse/charts for filing
Sends
  copy of discharge form letter to referring physician, Medical Records, Accounting/chart to Coding
FILES
  copy of patient correspondence in folder/medical record in inactive file
Places
  check in drawer for cash and checks

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Medical records/charts	Accuracy
Typewriter	Receipts	Checking
Files	Cash/checks	Typing
Date stamp		Filing
		Computational skills

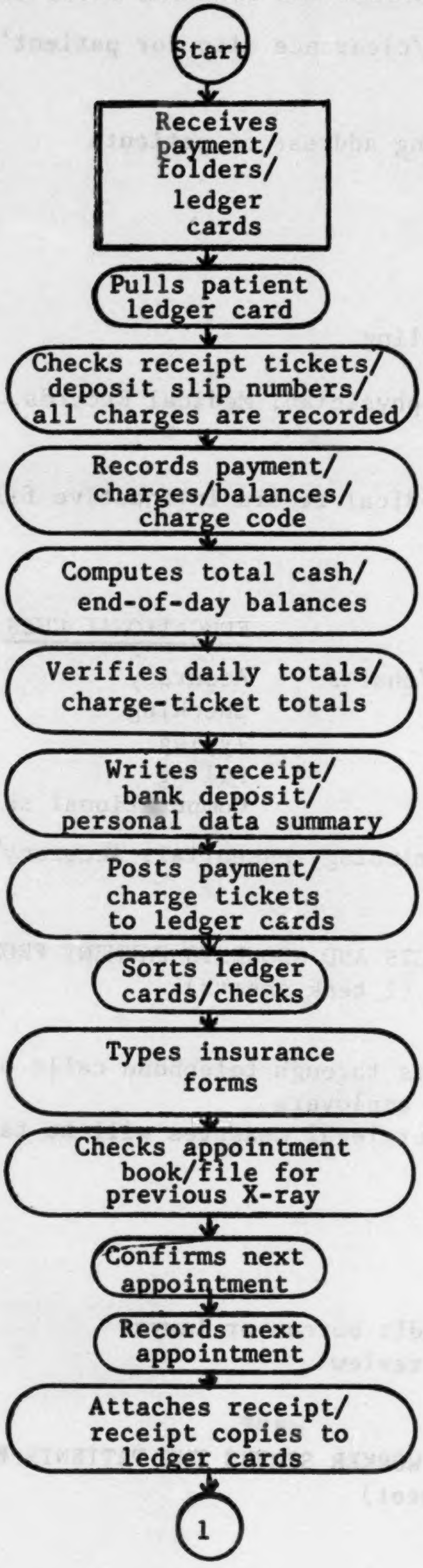
REPORTED CRITERIA: "Knowledge of medical terminology essential; Accuracy"

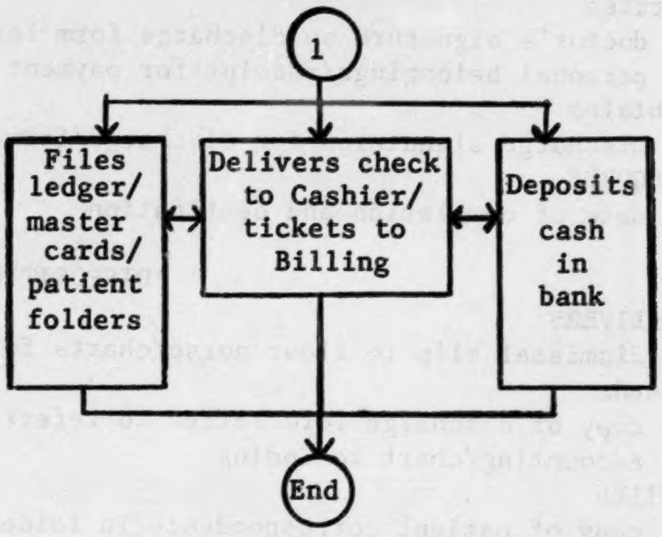
6. GIVEN PATIENT ACCOUNTS, THE WORKER CONTACTS AND REQUESTS PAYMENT FROM PATIENTS WHOSE ACCOUNTS ARE DELINQUENT. (2 task sheets)

Receives patient accounts
Searches for leads to ex-patient's whereabouts through telephone calls or letters to friends, relatives, neighbors, or employers
Informs ex-patient of responsibility to pay or legal measures will be taken
Requests immediate payment
Locates addresses of ex-patients
Lists delinquent accounts
Types form letters to patient, his employer
Pulls overdue accounts after six months
Batches overdue accounts for referral to credit bureau or lawyer
Delivers overdue accounts to supervisor for review

7. GIVEN A REQUEST FOR POSTAGE STAMPS, THE WORKER SERVES THE PATIENTS BY SELLING THEM POSTAGE STAMPS. (1 task sheet)

8. GIVEN PATIENT FOLDERS, LEDGER CARDS, AND PAYMENTS, THE WORKER RECEIVES AND POSTS PAYMENTS FOR MEDICAL SERVICES. (16 task sheets)


Start
Receives payment/ folders/ ledger cards
Pulls patient ledger card
Checks receipt tickets/ deposit slip numbers/ all charges are recorded
Records payment/ charges/balances/ charge code
Computes total cash/ end-of-day balances
Verifies daily totals/ charge-ticket totals
Writes receipt/ bank deposit/ personal data summary
Posts payment/ charge tickets to ledger cards
Sorts ledger cards/checks
Types insurance forms
Checks appointment book/file for previous X-ray
Confirms next appointment
Records next appointment
Attaches receipt/ receipt copies to ledger cards
1


1
Files ledger/ master cards/ patient folders
Delivers check to Cashier/ tickets to Billing
Deposits cash in bank
End

SUPPLEMENTARY STEP: Calls out-patient department to report payments

HARDWARE

Posting machine
Adding machine (10-key)
Telephone
Typewriter
Files

SOFTWARE

Patient files
Ledger cards
Deposit slips
Receipt tickets
Appointment book
Adding machine tape

EDUCATIONAL CUES

Accuracy
Checking
Typing
Filing
Communication skills
Computational skills

REPORTED CRITERIA: "Accuracy; Each payment properly recorded; Communicate effectively with people; Proficiency in mathematics; Skill in detecting errors as posting; Common sense"

9. GIVEN LAB REPORTS, CASE HISTORIES, AND RECORDS OR AN ORAL REQUEST, THE WORKER RECORDS INFORMATION ON PATIENT CHARTS AND RECORDS. (28 task sheets)

ACQUISITION

RECEIVES

lab reports/nurse's listing of patient name, room number, temperatures, pulse, blood pressure/list of patients/oral request for records/records/gain and loss (admitted and discharged) sheets/X-ray authorization/voucher form/case histories/in-coming correspondence/patient ledger cards/charge and receipt tickets

PROCESS

SORTS

lab reports/records for filing, other department distribution/all papers in patient's file/charts alphabetically/doctors orders/ledger cards/charge, receipt tickets

Pulls

patient chart/requested patient record/discharge patient chart/ledger card for charge, receipt tickets

Obtains

prescribed medicine

CHECKS

test results received/chart for omission/chart for patient status/patient chart numbers are on lab reports/files for missing records/master file for patient card/chart rack

Writes

patient number on X-ray authorization form/notation on "out" card with name of person requesting, date record removed/new divider labels

Attaches

routing slip to record/correspondence to patient's ledger cards/lab report to lab sheet/master card to X-ray authorization, voucher form/label to authorization form, voucher, master card

TYPES

patient's name, number, doctor's name, date, patient's age on label/oral instructions on standard order form/dictated information on charts/discharge summary on chart

Proofreads

all typewritten materials

RECORDS

patient data from nurse's list in notebook/from notebook to patient's chart/patient record pulled/completed order/lab report information on patient's chart/surgeries

CALLS

all possible borrowers to locate missing record

DISPOSITION

Places

lab sheet, report in patient's folder/patient record in doctor's folder

FILES

health chart folder/records/report in patient's chart folder/patient chart/results of tests/completed chart/patient's ledger cards/case histories

Sends
doctor's folders to doctors/located record to requestor
DELIVERS
labelled X-ray authorization form, voucher, master card to X-ray technician/nurse's orders to appropriate nurse/medicine to patient/chart to receptionist/ledger cards, charge, receipt tickets to Posting

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Files	Laboratory reports	Filing
Typewriter	Patient's charts, records	Typing
Telephone	Notebook	Communication skills
		Accuracy
		Checking

REPORTED CRITERIA: "No missing statistics, high degree of care in transferring numbers accurately; Ability to move quickly in emergency cases; Accuracy in filing; Good working knowledge of the work done in other departments; Perseverance in searching; No complaints; Must be able to read doctor's writing; Knowledge of coded names of tests; Must proofread well; Degree of knowledge of medical terminology; Good knowledge of English and spelling; Accuracy, attention to small details"

10. GIVEN PATIENT'S ACCOUNTS AND CHARGE SLIPS, THE WORKER COMPUTES, TYPES, AND MAILS BILLING STATEMENTS FOR MEDICAL SERVICES. (8 task sheets)

ACQUISITION

RECEIVES
billing statements from Data Processing/computer bills/patient account from Cashier/charge slips
Pulls
patient record or chart/patient ledger card

PROCESS

SORTS
bill punched cards
CHECKS
ledger card with billing statement/special services performed/insurance coverage/to see if bill is paid/charge slips
Verifies
insurance coverage
COMPUTES
insurance coverage
TYPES
amount owed on statement/collection forms/patient's bill from computer card information/record card inserting patient name, date of appointment, reason for visit, charge, new balance
Writes
receipt for paid services
Attaches
form letter to billing statement

Inserts
  statements in envelopes
Stamps
  letters with postage meter
SORTS
  mail for mailing

DISPOSITION

FILES
  patient record/statements in patient folders
MAILS
  letters/statements to patients
DELIVERS
  form letter and billing statement to supervisor/ledger cards, charge slips, receipts to Accounting

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Billing statements	Typing
Files	Patient account	Filing
Postage machine	Charge slips	Accuracy
	Receipt	Concentration
	Form letters	Computational skills

REPORTED CRITERIA: "Current record is kept for each patient so he will receive a correct monthly statement of his bill from the doctor; Knowledge of various types of hospitalization policies and coverages; Legible handwriting; Proofreading; If no ticket is written through oversight, there is no charge to patient because there is no record of visit"

11. GIVEN ACCOUNT CARDS, WITHDRAWAL-OF-FUNDS FORM, OR ORAL REQUEST, THE WORKER HANDLES PATIENT FUNDS. (4 task sheets)

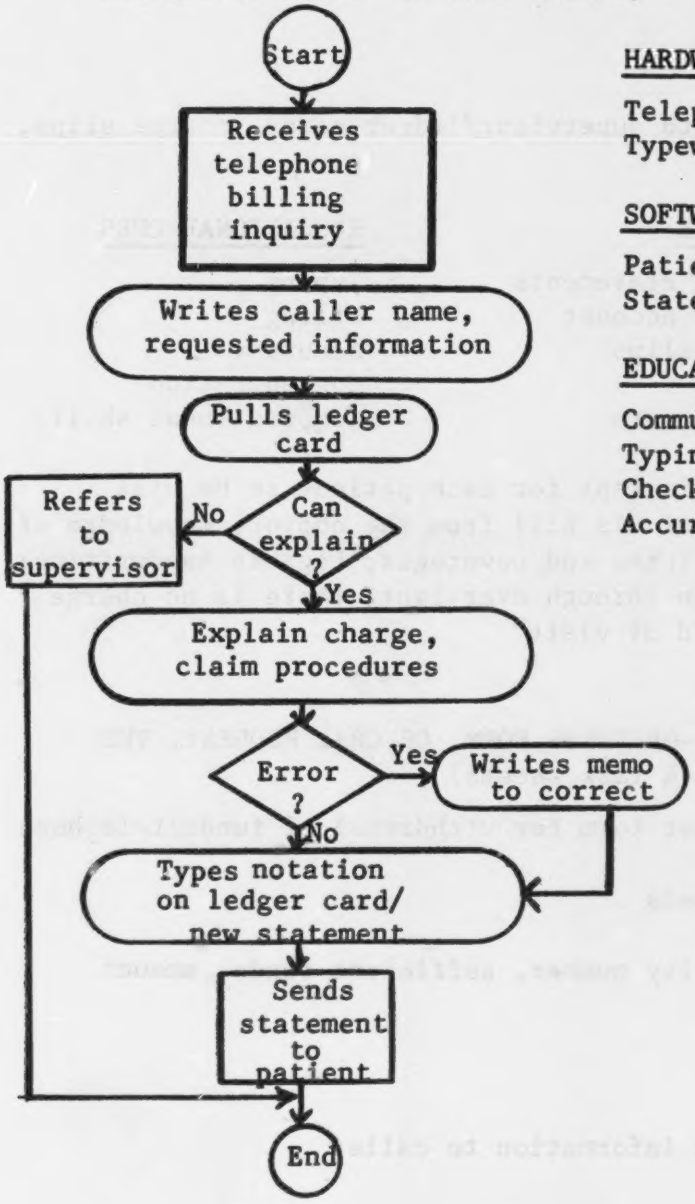
Receives patient account cards/request form for withdrawal of funds/telephone inquiry
Adjusts posting machine for withdrawals
Pulls color coded account cards
Checks account card for social security number, sufficient funds, amount restricted
Writes payment authorization
Posts amounts on posting machine
Stamps approval on payment request
Delivers requests to Cashier/account information to caller
Returns card to file

12. GIVEN FINAL BILLS AND INSURANCE FORMS, THE WORKER HANDLES INSURANCE ARRANGEMENTS FOR WELFARE CLIENTS ON MEDICARE OR MEDICAID. (2 task sheets)

Receives final bills, insurance form
Calls patient
Requests card for service/social worker name/certification letter for

authorized service
Calls social worker
Inquires if hospitalization is approved or will be
Informs social worker when patient is in hospital
Receives card authorizing service
Sends form to Billing/county Accounting supervisor

13. GIVEN A TELEPHONE BILLING INQUIRY, THE WORKER ANSWERS QUESTIONS REGARDING PATIENT BILLING. (3 task sheets)


Start
Receives telephone billing inquiry
Writes caller name, requested information
Pulls ledger card
Can explain ?
No
Refers to supervisor
Yes
Explain charge, claim procedures
Error ?
Yes
Writes memo to correct
No
Types notation on ledger card/ new statement
Sends statement to patient
End

HARDWARE

Telephone
Typewriter

SOFTWARE

Patient ledger card
Statement forms

EDUCATIONAL CUES

Communication skills
Typing
Checking
Accuracy

REPORTED CRITERIA: "High degree of patience and skill in effectively communicating; Coding knowledge; Minimum level of knowledge of general bookkeeping procedures and Medicare procedures"

14. GIVEN PUNCHED CARDS, INSURANCE FORMS, PATIENT ACCOUNTS, THE WORKER COMPUTES AND RECORDS INSURANCE AMOUNTS, AND REQUESTS REIMBURSEMENT FOR MEDICAL CHARGES. (15 task sheets)

ACQUISITION

RECEIVES
punched cards from Data Processing/insurance forms/completed insurance forms/ dismissed patient account/Medicare verification/accounts receivable cards/ billing forms

PROCESS

Pulls
patient's chart or file/account or ledger card
Writes
room number on punched card
SORTS
punched cards by room number/forms for mailing/ledger, account cards
Stamps
chart requesting information
CHECKS
charts for completion/to whom form should go for completion/that all bills are on ledger card/patient account for hospital charges/patient eligibility for Medicaid, Medicare/diagnosis name/previous insurance form/lab work/ previous hospitalizing/amounts due
COMPUTES
extension/discount/deductions/total reimbursement/charges
TYPES
record of charges on Medicare form/non-medical information from chart to insurance form/insurance information on ledger card/medical diagnosis/ late charges/type of room/work sheet information on Medicare form/reimbursement form
Writes
date claim form sent/"completed" on punched card/insurance information on patient folder/charges on work sheet/information from Medicare form on auditors log sheet
Verifies
doctor's signature/insurance release signed by patients/bill totals/amounts listed
RECORDS
patient name, chart number, doctor, type of form/to whom form sent/Medicare form information--date statement sent, to whom sent, medical services, charges/Medicare payment in log
Attaches
overdue notice to statement
Obtains
patient, doctor's signature on Medicare form

DISPOSITION

Sends
completed insurance forms to Reimbursement/overdue bill to credit manager
FILES
patient folders/Medicare forms and folders
MAILS
insurance forms/forms to Medicare/statement
DELIVERS
punched cards to Data Processing/insurance form to doctor for completion/ check and adding machine tapes to Cashier

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Patient accounts	Accuracy
Files	Punched cards	Checking
Adding machine (10-key)	Medicare book	Typing
		Filing
		Computational skills

REPORTED CRITERIA: "Book must be current and complete; Moderate level of reading skill, interpreting forms; Check typing and amounts carefully; Computation must be correct; General knowledge of Medicare, Medicaid restrictions; No complaints; Must know coding, names of medical treatments; Correct diagnosis name"

15. GIVEN ADMITTING AUTHORIZATION ID CARD FOR EIGHT-DAY HOSPITAL STAY PERIOD, THE WORKER OBTAINS EXTENSIONS ON ID CARDS ON THE SEVENTH DAY. (1 task sheet)

Receives lists of day's admissions
Checks if patient is still in hospital on seventh day
Calls Cashier for notice of discharge
Calls hospital floor for report on condition of patient and doctor's orders
Calls doctor for possible discharge date
Calls patient advising him to contact medical consultant
Calls medical consultant to inform him name of patient, admission date, number, diagnosis, doctor's name, address and telephone
Calls admitting doctor to justify continuation of hospitalization
Checks further extensions required with doctor

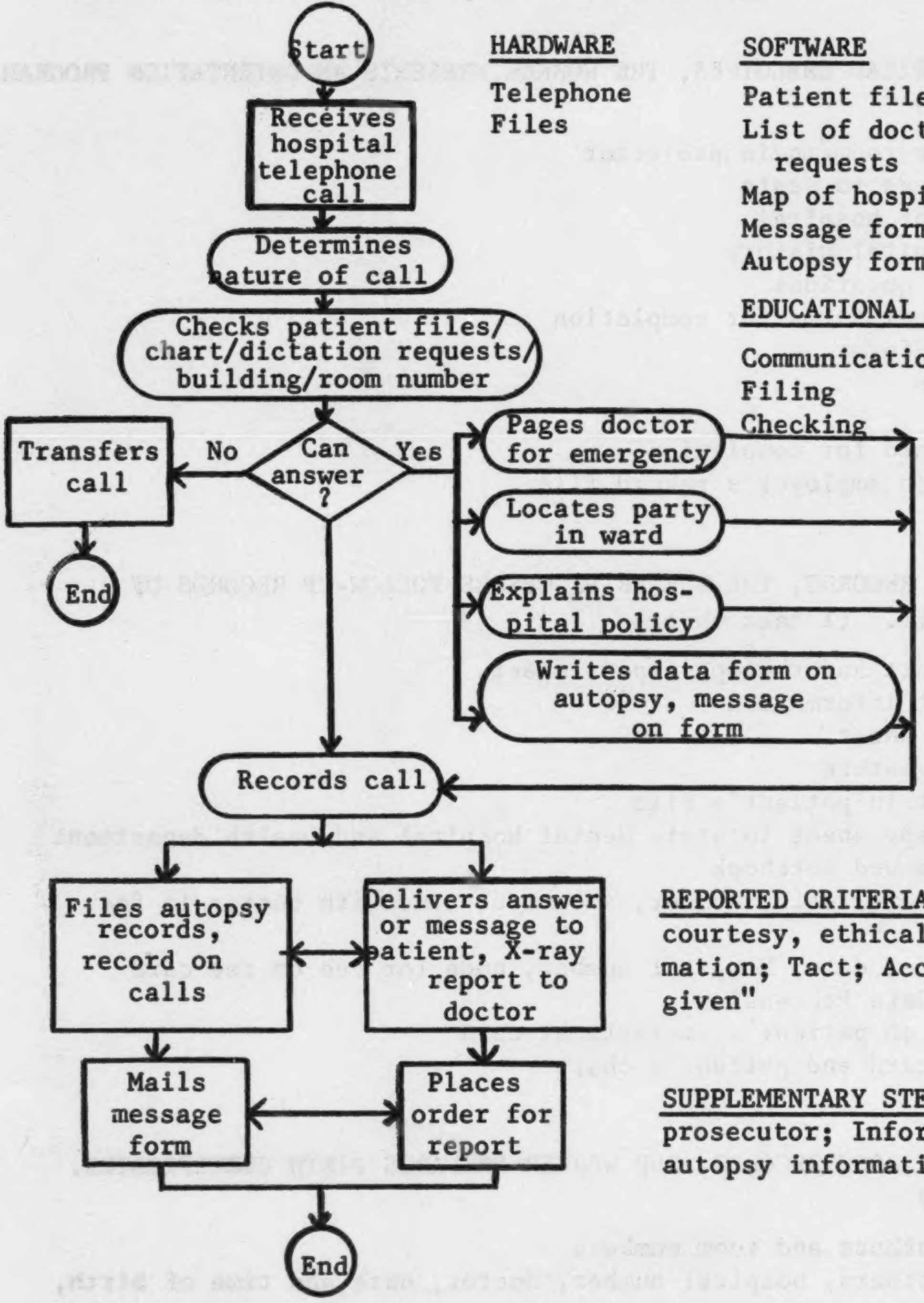
16. GIVEN CARDS ON STUDENT NURSES, THE WORKER REQUESTS STUDENT NURSES MAKE ARRANGEMENTS FOR HEALTH EXAMINATION APPOINTMENTS. (1 task sheet)

Receives cards on student nurses
Informs student nurses to make appointment for health examination
Checks appointment sheet
Arranges health examination appointment
Mails reminder of health examination
Delivers report to nurses, Admissions Office on students ignoring summons for examination

17. GIVEN PRE-EMPLOYMENT HOSPITAL REGISTRATION FORMS AND NEW EMPLOYEE, THE WORKER PROCESSES NEW EMPLOYEE REGISTRATION AND PERSONNEL FORMS. (1 task sheet)

Receives pre-employment registration form/new employee
Requests employee complete necessary employment forms
Writes new employee personal data on data sheet
Types additional personnel forms
Records name, date, department in new employee's record book
Files employee folder

18. GIVEN INCOMING HOSPITAL TELEPHONE CALLS, THE WORKER ANSWERS QUESTIONS OR REFERS THE CALL TO MORE QUALIFIED PERSONNEL. (16 task sheets)


Start
Receives hospital telephone call
Determines nature of call
Checks patient files/ chart/dictation requests/ building/room number
Can answer ?
No
Yes
Transfers call
End
Pages doctor for emergency
Locates party in ward
Explains hospital policy
Writes data form on autopsy, message on form
Records call
Files autopsy records, record on calls
Delivers answer or message to patient, X-ray report to doctor
Mails message form
Places order for report
End

HARDWARE

Telephone
Files

SOFTWARE

Patient files or charts
List of doctor's dictation requests
Map of hospital for reference
Message form
Autopsy form

EDUCATIONAL CUES

Communication skills
Filing
Checking

REPORTED CRITERIA: "Reliability, courtesy, ethical giving of information; Tact; Accurate information given"

SUPPLEMENTARY STEPS: Calls prosecutor; Informs prosecutor of autopsy information

19. GIVEN PERSONNEL LISTINGS AND MASTER SALARY SCHEDULE, THE WORKER RECORDS PAYROLL CHANGES FOR HOSPITAL EMPLOYEES. (2 task sheets)

Receives personnel listing of salary increases/master salary schedule
Checks for salary changes/correct job classification
Pulls employee personnel file
Records salary change on personnel records/revision date at top on master salary schedule
Completes salary form for each change
Places salary form in interoffice mail

Attaches increase memo to salary schedule for verification of change
Files employee file

20. GIVEN NEW HOSPITAL EMPLOYEES, THE WORKER PRESENTS AN ORIENTATION PROGRAM. (1 task sheet)

Arranges conference room/movie projector
Directs new employees to seats
Explains policies of hospital
Shows movie of hospital history
Answers employee's questions
Distributes personnel forms for completion
Collects completed forms
Dismisses employees
Rewinds film
Checks forms returned for completion
Places forms in each employee's record file

21. GIVEN PATIENT RECORDS, THE WORKER PROCESSES FOLLOW-UP RECORDS OF PATIENT'S VISIT. (1 task sheet)

Obtains patient chart and therapy report sheets
Types therapy sheet information
Proofreads therapy sheet
Stamps doctor's signature
Files therapy sheet in patient's file
Sends copy of therapy sheet to state mental hospital and health department
Obtains fee card record notebook
Records patient's name, date, number, amount of time with doctor in fee record book
Types patient's name, date, hospital number, code for fee on fee card
Sends fee card to Data Processing
Writes information on patient's statistical card
Files statistical card and patient's chart

22. GIVEN DELIVERY ROOM RECORDS, THE WORKER PREPARES BIRTH CERTIFICATES. (1 task sheet)

Obtains names of mothers and room numbers
Records names of mothers, hospital number, doctor, date and time of birth, sex in record book
Delivers birth certificate form to mother for completion
Obtains birth certificate forms
Records length, weight of babies in weight record book
Stars in red, weight of premature babies
Types birth certificate form
Obtains birth certificate form approval and signature from mother
Sends birth certificate form copy to Medical Records when notified baby has gone home/original birth certificate to county office weekly

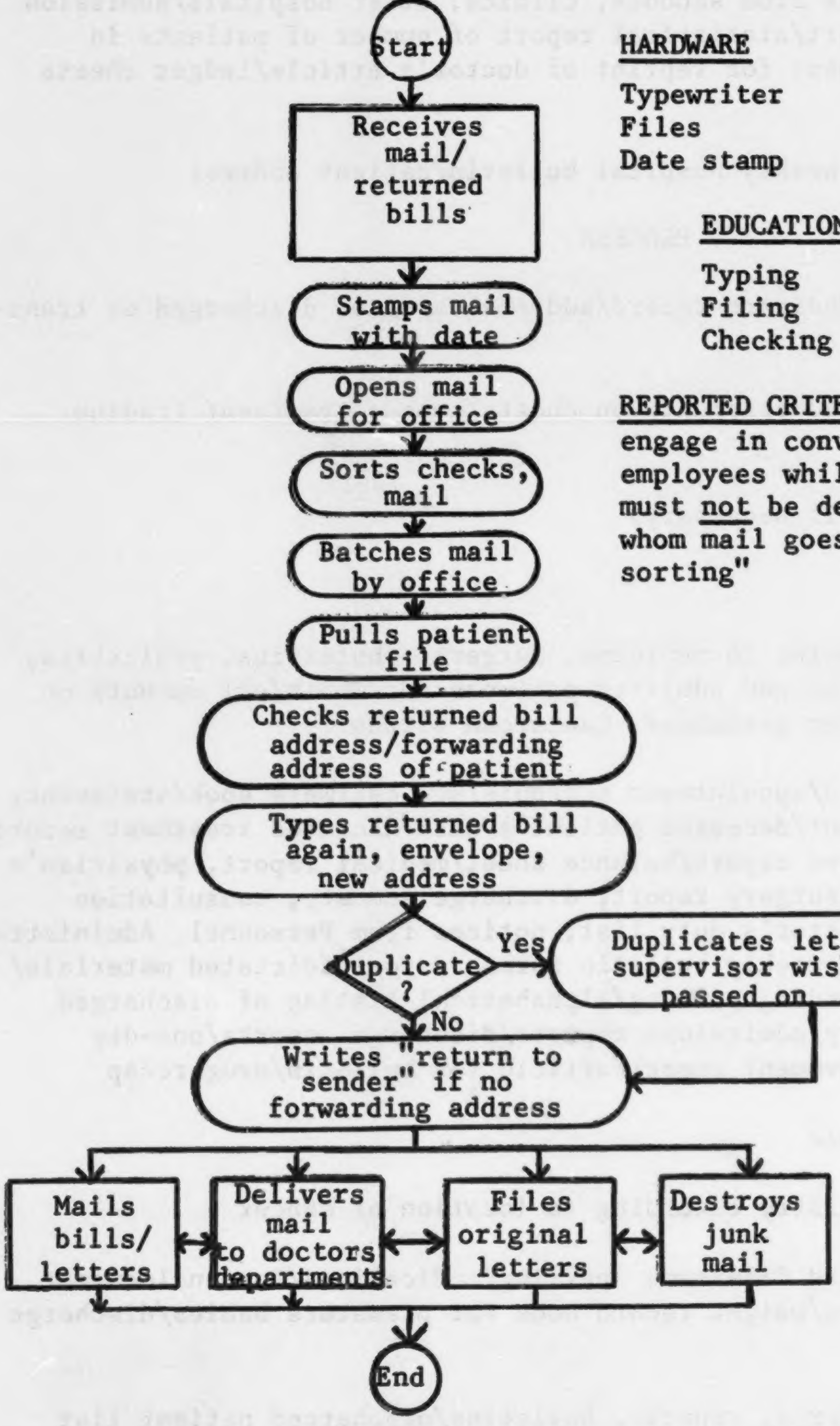
23. GIVEN MAIL, THE WORKER SORTS, ANSWERS, AND DISTRIBUTES MAIL THROUGHOUT THE HOSPITAL. (9 task sheets)

HARDWARE	SOFTWARE
Typewriter	Mail
Files	Checks
Date stamp	Patient's files

EDUCATIONAL CUES

Typing
Filing
Checking

REPORTED CRITERIA: "It is easy to engage in conversation with other employees while delivering mail, mail must not be delayed; Judgment as to whom mail goes; Extreme care in sorting"


Start
Receives mail/ returned bills
Stamps mail with date
Opens mail for office
Sorts checks, mail
Batches mail by office
Pulls patient file
Checks returned bill address/forwarding address of patient
Types returned bill again, envelope, new address
Duplicate ?
Yes
Duplicates letters supervisor wishes passed on
No
Writes "return to sender" if no forwarding address
Mails bills/ letters
Delivers mail to doctors departments
Files original letters
Destroys junk mail
End

24. GIVEN ORAL INSTRUCTIONS, REPORTS, AND LEDGER SHEETS, THE WORKER TYPES AND FILES MEDICAL LETTERS, FORMS, ARTICLES, AND REPORTS. (38 task sheets)

ACQUISITION

RECEIVES
oral instructions to write letter to patient/master appointment schedule/ estimate book/patient folders, ledger cards, diagnosis/death notice/dictated

belt/status form changes/articles for weekly bulletin/forms or reports to be duplicated/handwritten copy of letter/daily reports/discharged patient's cards/statistical tables from schools, clinics, other hospitals/admission sheet/daily census report/statistical report of number of patients in hospital/printouts/request for reprint of doctor's article/ledger sheets of out-patients

Obtains
doctor's duty list for weekly hospital bulletin/patient address

PROCESS

Pulls
patient's ledger card/Medicare record/address cards of discharged or transferred patients

Writes
instructions/patient's address/date on charts/cancer treatment (radium, cobalt)

Corrects
rough drafts, revises (if necessary)

COMPOSES
letter to patient

COMPUTES
number of males and females in medicine, surgery, obstetrics, pediatrics, newborn/number discharged and admitted patients for month/all amounts on statistical tables/number premature, Caesarean births

TYPES
letters/appointment card/appointment schedule/new estimate book/statement, cost of medical treatment/deceased patient's card/dictated treatment records/ new status form/operative report/balance sheet/medical report, physician's report/history report, surgery report, discharge summary, consultation report/dummy copy of doctor's duty list, notices from Personnel, Administration offices/stencil of weekly bulletin forms, reports/dictated materials/ memos/form letters regarding billing/alphabetical listing of discharged patients/cancer registry/admissions reports/discharge reports/one-day patient report/daily movement report/article for bulletin/drug recap

Proofreads
all typewritten materials

Codes
status cards/cancer registry according to location of cancer

CHECKS
schedule for changes/card file/name spelling/medications/for enclosures/ for computational errors/weight record book for premature babies/discharge sheet

DUPLICATES
status form or report/forms, reports, bulletins/discharged patient list

RECORDS
cancer information in medical record book/number premature, Caesarean births on census form/number discharges

Obtains
signature of doctor on report/approval of reports from doctor

Attaches
appointment card to letter/deceased card to ledger card/dummy list to pasteup/signed original report to patient's charts

Writes
doctor's name on letter/number minutes required to transcribe/name, date, drug, price on ledger sheet

DISPOSITION

DELIVERS
information to Hospital Administration

Sends
cancer registry to State Department of Health/statistical reports to senior clerk for checking/census form to supervisor/original operative reports to Medical Records, copy to surgeon/copy of all reports to doctor/duplicated forms or reports to requesting departments

MAILS
statement to probate court by hearing date/status form copies to Mental Health Service/doctor's articles/form letter to probate court requesting date for filing claims against estate/letters/estimate book copies to various departments/medical statement/form letter to administrator, executor of estate requesting payment

Distributes
copies of master appointment schedule to doctors, nurses, lab, receptionist/memos to staff/discharged patient list

FILES
copy of all reports/discharged patient list/patient's folder, ledger card/deceased patient card/operative report

Places
printouts in binder book

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Patient's files	Checking
Adding machine (10-key)	Medical documents	Typing
Files	Coding manuals	Proofreading
	Stencils	Accuracy
		Filing
		Computational skills

REPORTED CRITERIA: "Ability to check own work and that of others; Correct coding of status; Medical terminology essential; Proofreading very important; Ability to compose a letter given brief description of content; Deadlines for reporting medical information met; All wording correct; Willingness to work overtime to complete work; Accounting for all drugs used"

MEDICAL CRITICAL INCIDENTS

"The worker that held the job immediately before this worker could not handle the pressure. A research proposal had to be in to meet a deadline, and the worker went to pieces over it. We had to hire a worker to complete it."

"The worker received a telephone request for five charts (records) from a nurse on the staff at a time when the worker was rushed. In her haste to complete her work and leave for an afternoon off, she neglected to make a record of the request. After she had left for the day, the nurse called to find out why the records had not been sent down."

MEDICAL CRITICAL INCIDENTS

"About two years ago the worker overlooked results of an eye examination for an executive of a local bank. Because of this failure, the bank almost withdrew the account from the clinic. It was only after considerable consultation that the account remained with the clinic. This loss would have resulted in the clinic losing thousands of dollars."

"On a Friday evening one resident suddenly remembered a report that had to be in the next day. He rushed to the hospital and found the worker sitting at her desk typing the report. She also had remembered the report that evening. She did not want the doctor to get in trouble for not having the report in and felt it was up to her to see that it was in."

"One upset mother called the hospital when her child had been injured. It was impossible to understand what the problem was, but the employee had the presence of mind to ask the address saying that someone would come immediately."

"In the billing operation it is necessary to send follow-up collection letters. The worker did not pick up the recent payment on the patient's card and sent out the final-notice letter. The patient called the hospital as he was extremely upset. The worker pulled the patient's file, apologized for her mistake, and retained the goodwill of the patient."

"The worker must open the mail and retain the checks that arrive in payment of hospital bills. She noticed that one check coming in had the numerical amount crossed out and changed. She called the bank and found that they would not accept this check so she returned it to the patient with a note, thereby saving everyone's time."

"The worker made a suggestion concerning the procedures involved with a refund to a patient. The idea was for a revision in the form being used to show that the account had been researched and by whom. The worker also recommended a form letter to be used. The suggestions have been incorporated into our overall hospital procedure."

"Recently there was a pending strike by the attendants at the hospital. The worker had a lot of photocopying to do for the director of the hospital in connection with the strike. She was quite willing to spend the extra hours to help at this crucial time."

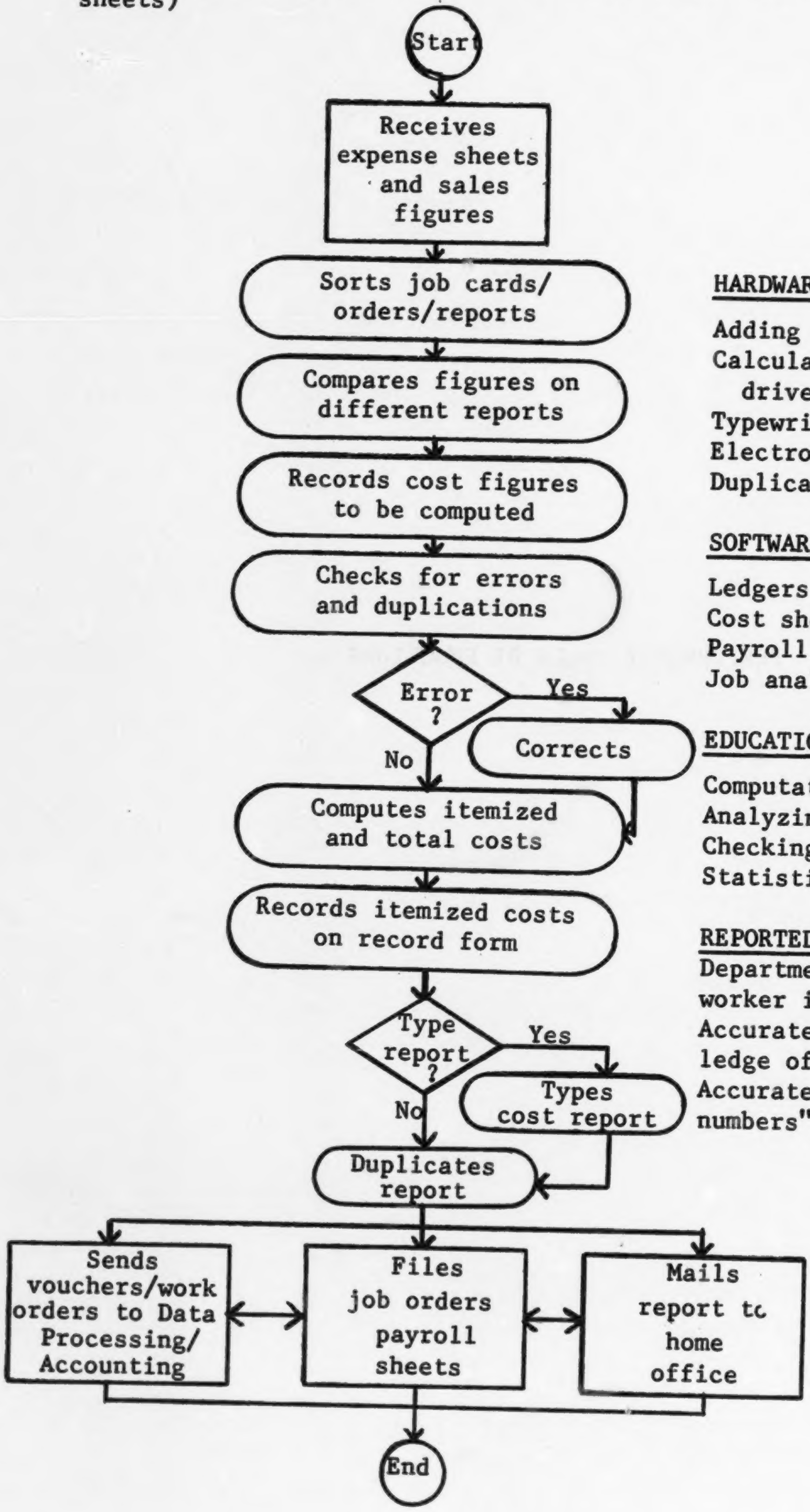
"On the birth certificate there is legal information required from the doctor which the worker is assigned to get. The worker has failed to get information regarding abnormal births because she does not feel this information is important."

"When a particular doctor is behind on his dictation of surgical reports, the worker will call him and tactfully remind him of this. The doctor has mentioned that he appreciated the manner in which the worker reminded him of his dictation backlog and feels she is interested in helping him with a responsibility in which he tends to lag."

F. PERFORMANCE GOALS BY FUNCTIONS

1.1 ACCOUNTING, COST ACCOUNTING

1. GIVEN EXPENSE SHEETS AND/OR TOTAL SALES FIGURES, THE WORKER COMPUTES AND ALLOCATES UNIT COSTS TO JOBS AND SALES/PRODUCTION ESTIMATES. (33 task sheets)


Start
Receives expense sheets and sales figures
Sorts job cards/ orders/reports
Compares figures on different reports
Records cost figures to be computed
Checks for errors and duplications
Error ?
Yes
Corrects
No
Computes itemized and total costs
Records itemized costs on record form
Type report ?
Yes
Types cost report
No
Duplicates report
Sends vouchers/work orders to Data Processing/ Accounting
Files job orders payroll sheets
Mails report to home office
End

HARDWARE

Adding machine
Calculator (rotary, key-driven)
Typewriter
Electrostatic copier
Duplicator

SOFTWARE

Ledgers
Cost sheets
Payroll sheets
Job analysis sheets

EDUCATIONAL CUES

Computational skills
Analyzing cost data
Checking for duplication
Statistical typing

REPORTED CRITERIA: "Finance Department will question worker if records are unclear; Accurate with figures; Knowledge of cost accounting; Accurate in transferring numbers"

ACQUISITION

RECEIVES
(Administrative Costs)
management expense reports
(Electronic Data Processing Costs)
sheet listing customers time use of computer/total monthly sales sheet
(Depletion Costs)
asset distribution sheet
(Production Costs)
job completed reports/daily inspection reports/laboratory reports/assembly reports/work order cards, workers names, materials used/suppliers bills/production and labor cost computations/open orders (parts not shipped)/cutting records (fur pelts)

PROCESS

SORTS
inspection reports and job cards by function/worker/job/department/job orders by unit numbers
COMPARES
job sheet labor totals with time card labor totals/sales figures from company branches
RECORDS
postage used daily by each department/gas used daily/cost of production of fur pelts/all production costs in ledger/allocation of management costs to departments by set percentages/cost of production on invoices of goods sold to company branches
CHECKS
projected expenditures/last year's expenditures/for errors and duplication of entries
COMPILES
records pertaining to postage, gas, telephone billing/job cost sheets from suppliers' bills
COMPUTES
necessary quantities of raw material to order by noting raw materials used/difference between cost of pelts and sale of pelts/itemized costs of production by total cost of production/computer time into dollar amounts/cost of materials used/labor cost (total and each worker)/cost of each product (unit cost)
Adds
previous week's labor totals to present week's totals
Totals
postage used by all departments/each department's telephone charges/all expenses/year-to-date amounts of expenses
RECORDS
on tally sheet (cost sheet) by name, code, job number, time spent/gain or loss in sale of pelts/production and cost figures on summary form
Writes
computer time dollar amounts on customer record cards/list of component parts of product as computer input/amount of time actually used in production by estimated time
TYPES
computer time service voucher/monthly report/cost figures on daily report/cost on card for job to which bill applies

DUPLICATES
cost analysis report

DISPOSITION

Sends
computer time service vouchers to Accounting/work order breakdown to Data Processing/invoices to Billing
FILES
job orders numerically/requisitions, payroll sheets, supply forms, invoices/cutting records (fur pelts) by style number
MAILS
original report to home office monthly

SUPPLEMENTARY STEP: Keeps extra copy of job order when accident involved

2. GIVEN ACTUAL AND STANDARD COST FIGURES, THE WORKER COMPUTES VARIANCE REPORTS. (7 task sheets)

Obtains last month's variance report
Receives accounting inventory sheets/computer printouts of cost changes/trial balance
Records present figures (variable and fixed overhead, direct and indirect labor, packaging)
Subtracts actual cost from standard cost to get current variances
Records computed variances by department into spending, capacity, and efficiency
Computes year-to-date variances
Checks all entries
Delivers variance sheet copies to another worker for checking/to Duplicating/supervisor/company offices

3. GIVEN COMPONENT-PARTS LIST AND PRODUCTION-COST-ESTIMATE REQUEST, THE WORKER PREPARES/HELPS PREPARE BIDS AND ESTIMATES OF COSTS OF PRODUCTS AND SERVICES. (12 task sheets)

Receives request to estimate TV spot advertising/estimates of job costs/engineer's change-product notices
Receives list of all parts needed in producing a product/blueprints
Determines labor standard costs/changes occuring in product/hidden costs
Checks cost guidebooks/engineer's specifications
Computes all estimates and standard-cost breakdowns
Types statistical cost breakdowns
Sends computations to engineers/client/chief engineer/estimator
Receives copy of bid/estimate/contract to be negotiated
Records approval or disapproval of contract figures
Sends final noted contract figures to company offices/supervisor/Data Processing
Files bids/estimates/contract copies

REPORTED CRITERIA: "Two day maximum in processing bids; Great accuracy and memory required; Awareness of each part in total construction picture; Errors could cause great company financial loss"

4. GIVEN THE RESPONSIBILITY OF COMPUTING THE COST ANALYSIS OF PRODUCTION OR OF A PIECE OF MACHINERY, THE WORKER PERSONALLY OBSERVES PRODUCTION AND READS BLUEPRINTS TO DERIVE COST ESTIMATES. (2 task sheets)

Obtains job cost sheets (partially completed)
Obtains machinery blueprints/purchase order forms
Obtains cost information by observing men working
Discusses job production with supervisors
Writes job cost information
Examines machinery blueprints
Computes machinery total cost by each of its parts
Delivers job cost information/machinery cost analysis to supervisor
Files copy in own file

5. GIVEN THE RESPONSIBILITY OF FINDING WAYS TO IMPROVE PRESENT METHODS, THE WORKER COMPILES RELEVANT STATISTICS AND PLANS IMPROVEMENTS BY SUBMITTING COST ANALYSIS OF PROPOSED METHODS. (2 task sheets)

6. GIVEN ROUGH DRAFTS OF COST ANALYSIS REPORTS, THE WORKER TYPES COST REPORTS. (4 task sheets)

Receives cost analysis rough draft
Determines best columnar set up for cost report
Checks figures by computing all totals
Types cost tables and explanations as to differences in actual and estimated costs
Delivers report to Duplicating/Cost Analysis/Accounting

7. GIVEN CURRENT COST ANALYSIS AND ADDITION SPECIFICATIONS, THE WORKER SETS UP NEW ACCRUAL ACCOUNTS AND WRITES DESCRIPTIONS OF ACCOUNT CONTENTS. (2 task sheets)

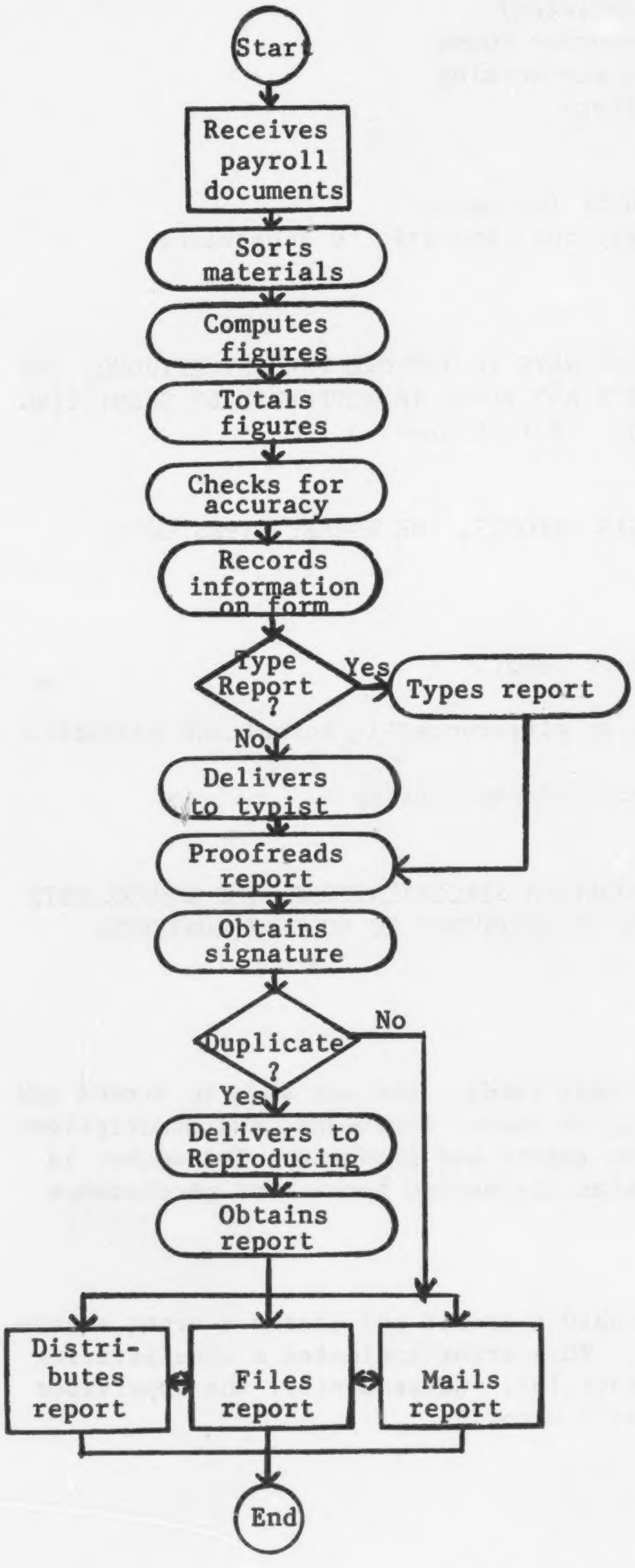
COST ACCOUNTING CRITICAL INCIDENTS

"The worker and another person made a cost study. She was able to direct and assist the person in developing details of costs, locations, and descriptions of inventory items so that an excellent report was produced. The worker is very capable in reconciling discrepancies discovered because of persistence needed to complete study."

"About two weeks ago the worker overlooked a credit and listed a wrong amount on the standard production cost sheet. This error indicated a manufacturing loss of $30,000 that no one could account for. Consequently, the supervisor had to search until he found the worker's error."

1.2 ACCOUNTING, PAYROLL

1. GIVEN PAYROLL SHEETS, TIME SHEETS, JOB CARDS, PRINTOUTS, THE WORKER COMPILES PAYROLL REPORTS AND SUMMARIES. (15 task sheets)


Start
Receives payroll documents
Sorts materials
Computes figures
Totals figures
Checks for accuracy
Records information on form
Type Report ?
Yes
Types report
No
Delivers to typist
Proofreads report
Obtains signature
Duplicate ?
No
Yes
Delivers to Reproducing
Obtains report
Distri-butes report
Files report
Mails report
End

ACQUISITION

RECEIVES
payroll sheets / time sheets / job cards / printouts necessary for preparation of reports

PROCESS

SORTS
materials received
COMPUTES
all figures / net profit and loss
Extends
salaries
Totals
all figures/weekly and monthly figures
CHECKS
all figures for accuracy/ manuals for information/form for errors
Verifies
all totals
Proofreads
report after it is typed
RECORDS
information on form for report or summary/absences on forms/ employee time spent per activity according to assigned code/differences on payroll analysis form
Writes
reasons for differences
DELIVERS
to typist for typing / to Reproduction for duplicating
TYPES
form listing employees on no-leave-left list / time sheets/ job cards / overtime, payroll sheets
Obtains
signature of supervisor/report reproductions

DISPOSITION

MAILS/FILES/Distributes
payroll report

SUPPLEMENTARY STEP: Determines amount of difference between salaries budgeted and paid

REPORTED CRITERIA: "Coping with employees' errors in ladylike manner; Time pressures"

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Manuals on rates	Typing
Electronic calculator	Report forms	Coding
Adding machine (10-key)	Time sheets	Computational skills
	Payroll sheets	Accuracy
	Job cards	Proofreading
	Printouts	Checking

2. GIVEN PAYROLL INFORMATION, THE WORKER PREPARES A DUMMY PAYROLL. (1 task sheet)

Runs addressograph machine to print dummy payroll sheet
Writes necessary changes on dummy sheet
Refers to vacation schedule
Draws circles around name of employee on vacation
Delivers corrected dummy payroll to another employee

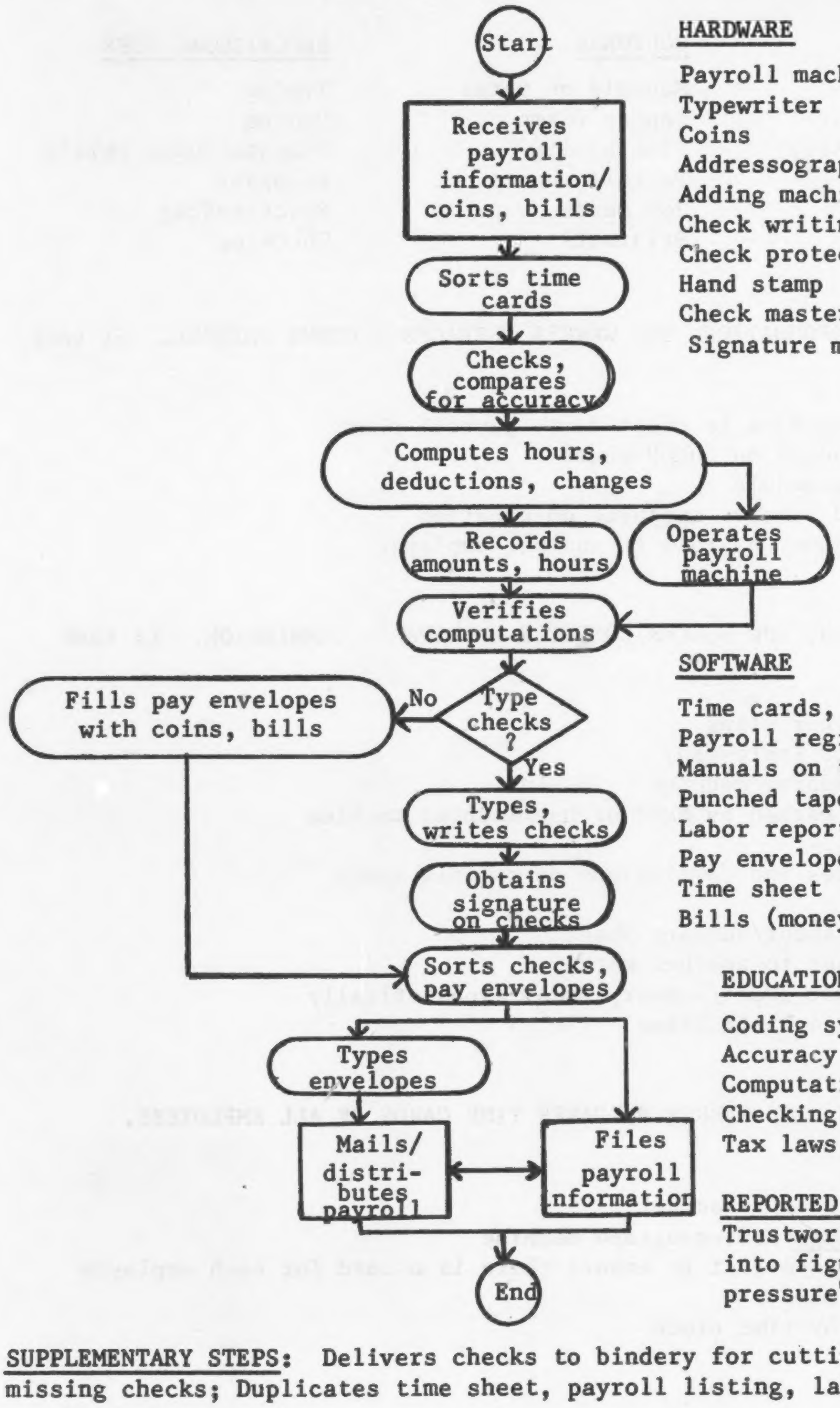
3. GIVEN INFORMATION, THE WORKER COMPUTES SALESMAN'S COMMISSION. (1 task sheet)

Receives short and over slips
Sorts slips by driver (salesman)
Totals with 10-key adding machine
Computes commission earned by hand or bookkeeping machine
Checks computations
Records drivers' names and commissions on payroll sheet
Types summary sheet
Photocopies payroll sheet/summary sheet
Delivers payroll sheet to another worker
Files original payroll sheet/summary sheet alphabetically
Mails summary sheet to distributor

4. GIVEN TIME CARDS, THE WORKER PREPARES TIME CARDS OF ALL EMPLOYEES. (1 task sheet)

Receives time cards from Personnel
Runs time cards through addressograph machine
Compares time cards with list to ensure there is a card for each employee
Stamps date on time card
Places card in rack by time clock

5. GIVEN PAYROLL INFORMATION, THE WORKER COMPUTES PAYROLL AND DISTRIBUTES PAYROLL CHECKS TO EMPLOYEES. (73 task sheets)


Start
Receives payroll information/ coins, bills
Sorts time cards
Checks, compares for accuracy
Computes hours, deductions, changes
Records amounts, hours
Operates payroll machine
Verifies computations
Type checks ?
No
Yes
Fills pay envelopes with coins, bills
Types, writes checks
Obtains signature on checks
Sorts checks, pay envelopes
Types envelopes
Mails/ distributes payroll
Files payroll information
End

HARDWARE

Payroll machine
Typewriter
Coins
Addressograph machine
Adding machine (10-key)
Check writing machine
Check protector machine
Hand stamp
Check master machine
Signature machine

SOFTWARE

Time cards, checks
Payroll registers
Manuals on taxes
Punched tape
Labor report sheets
Pay envelopes
Time sheet
Bills (money)

EDUCATIONAL CUES

Coding system
Accuracy
Computational skills
Checking
Tax laws, company policy

REPORTED CRITERIA: "Honest; Trustworthy; Convert hours into figures; Work under pressure"

SUPPLEMENTARY STEPS: Delivers checks to bindery for cutting apart; Locates missing checks; Duplicates time sheet, payroll listing, labor report

ACQUISITION

RECEIVES
  time cards /weekly payroll registers / payroll information sheets
Obtains
  copies of labor report sheets

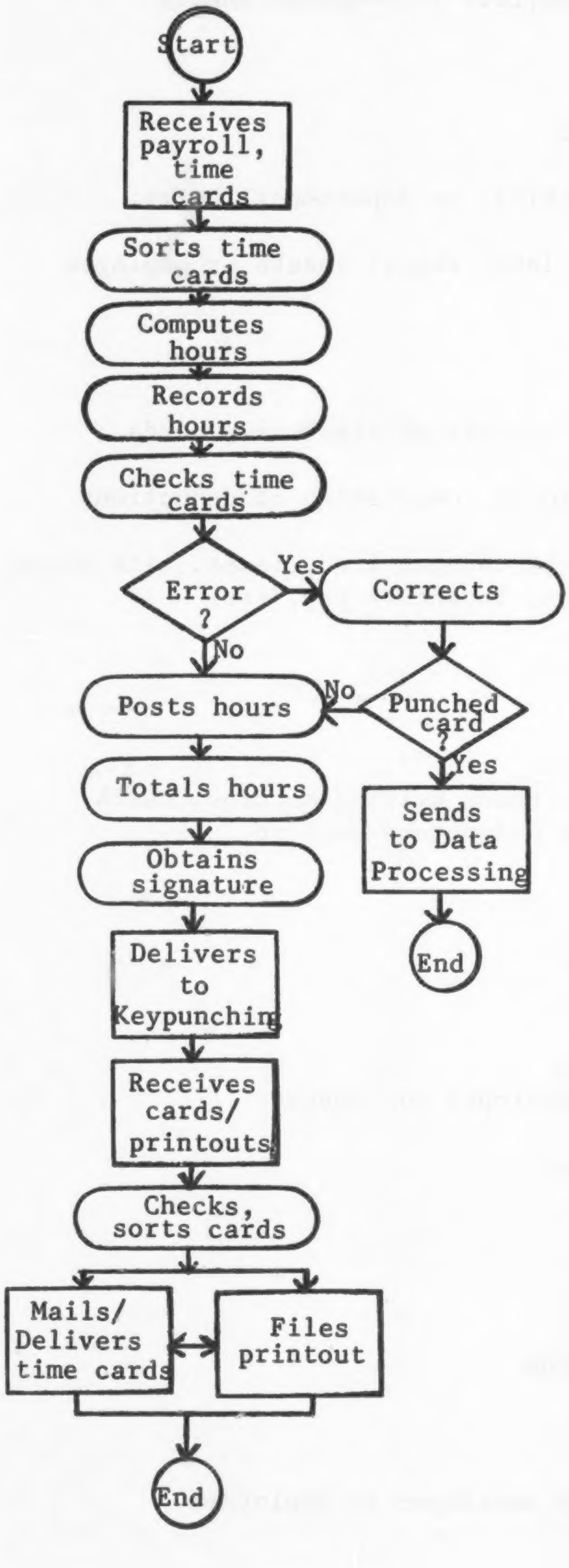
PROCESS

SORTS
  time cards according to job category, shift, or department/checks
RECORDS
  amounts and hours for each employee on labor report sheets or employee permanent record card
Writes
  date on adding machine tape
Stamps
  materials with date of pay period end /numbers on blank time cards
CHECKS
  information for accuracy / manuals to aid in computation of deductions
COMPUTES
  hours worked by employees, deductions and changes i.e., taxes, sick leave, bonds, loan payments, holidays, vacation, incentive pay, etc.
Extends
  individual hours for special piecework
Runs tape
  on all computations
OPERATES
  payroll machine / addressograph machine / check writing machine / check protector machine / check master machine / signature machine
Codes
  employee's hours by department
Punches
  tape on tape input machine for computer
Verifies
  computations
TYPES
  checks / time sheet / payroll listing / envelopes for checks
RECEIVES
  coins and bills to make up pay envelopes
Obtains
  signature on checks
Fills
  pay envelopes

DISPOSITION

MAILS
  checks to employees
Distributes
  payroll checks to employees/cash or pay envelopes to employees
FILES
  payroll information
Pulls
  checks for special handling

6. GIVEN PAYROLL AND TIME CARDS, THE WORKER CHECKS AND POSTS INFORMATION PERTAINING TO PAYROLL. (27 task sheets)


Start
Receives payroll, time cards
Sorts time cards
Computes hours
Records hours
Checks time cards
Error ?
Yes
No
Corrects
Posts hours
No
Punched card ?
Yes
Totals hours
Sends to Data Processing
Obtains signature
End
Delivers to Keypunching
Receives cards/ printouts
Checks, sorts cards
Mails/ Delivers time cards
Files printout
End

ACQUISITION

RECEIVES
  payroll and time cards from employees

PROCESS

SORTS
  time cards

COMPUTES
  hours for each craft / total time at the end of the month

RECORDS
  hours worked by each employee/ code number on time sheet for each employee

Stamps
  date on card

Posts
  hours to ledger cards / amounts to ledger cards

CHECKS
  completion of cards / printouts against time card information/ for signature of employer and temporary worker / for correctness of error / for balanced totals of time cards

Corrects
  errors missed in audit

RECEIVES
  cards from Keypunching/printouts from Data Processing

Obtains
  signatures of employee and supervisor

DISPOSITION

DELIVERS
  cards to Keypunching/Data Processing/file clerks/batches of cards to plants/corrected cards back to Data Processing

Distributes
  cards to clerk handling that unit

MAILS
  cards

FILES
  printouts

SUPPLEMENTARY STEPS: Binds cards by department with rubberband; Completes supervisor's and her own time sheet; Notes whether job will continue or worker is available for another job; Batches time sheets; Delivers new time sheets to each employee

REPORTED CRITERIA: "Ability to work under pressure; Proofreading; Knowledge of criteria for sorting batches for computer; Accuracy in dealing with numbers"

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Payroll, time cards	Batching
Hand stamp	Ledger cards	Coding
	Printouts	Accuracy

7. GIVEN TIME CARDS, THE WORKER FILES AND UPDATES WEEKLY PAYROLL TIME CARDS. (1 task sheet)

Stamps with plate stamping machine / the time card, using ID plate
Writes week ending date on time card
Files payroll time cards alphabetically by name
Removes previous week's employee payroll time card from files
Delivers payroll time cards to another worker

8. GIVEN WEEKLY ACTIVITY TICKETS, THE WORKER MAINTAINS RECORDS OF TIME SPENT DEVELOPING NEW PRODUCTS. (1 task sheet)

Receives weekly activity tickets
Checks for errors
Delivers to Keypunching
Records time spent on each new product project in log
Files computer listing

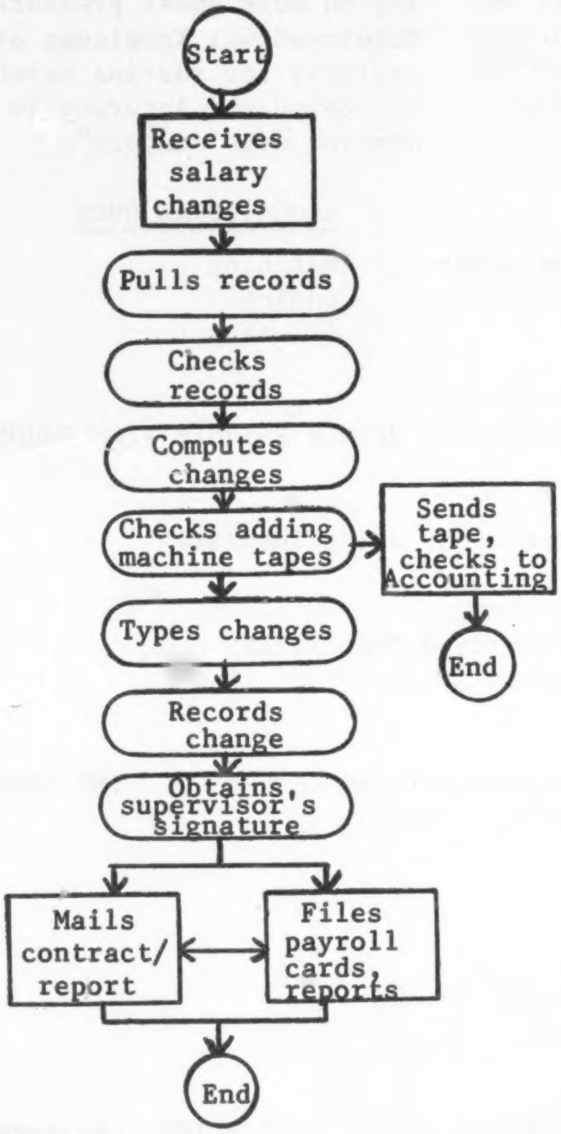
9. GIVEN ORAL INFORMATION, THE WORKER PROCESSES STATUS TIME SLIPS. (1 task sheet)

Receives oral information
Types employee data
Mails time slip to board for certification
Checks returned time slips for verification
Files certified time slip

10. GIVEN OUTPUT CARDS, THE WORKER COMPILES AN EMPLOYEE TRANSFER LIST. (1 task sheet)

Receives output cards
Punches (keysorts) job, department, code numbers on output cards
Sorts cards
Removes cards of transferred employees
Compiles transfer list from output cards
Delivers transfer list to another worker

11. GIVEN SALARY MODIFICATIONS, THE WORKER COMPUTES PAYROLL CHANGES. (15 task sheets)


Start
Receives salary changes
Pulls records
Checks records
Computes changes
Checks adding machine tapes
Sends tape, checks to Accounting
End
Types changes
Records change
Obtains supervisor's signature
Mails contract/report
Files payroll cards, reports
End

HARDWARE

Typewriter
Adding machine (10-key)
Files

SOFTWARE

Salary, policy manuals
Union contracts
Time reports, work sheet
Payroll cards, code sheets
Overtime sheets
Doctor's excuse

REPORTED CRITERIA: "Demonstrates ability to compute loss of time into money; Interpret union policy; Follow directions; Code"

ACQUISITION

RECEIVES
  salary changes oral or written
Pulls
  records

PROCESS

CHECKS
  records/adding machine tapes/sick leave remaining/listing to locate employees due salary increases/salary and policy manual/union contract for amount of increase/time against payroll card
COMPUTES
  base disability amount to daily rate/ changes on adding machine
Counts
  days absent
TYPES
  changes on forms
RECORDS
  change on card / days absent
Codes
  salary adjustment
Obtains
  supervisor's signature and approval of changes/verification of code sheet

DISPOSITION

Sends
  adding machine tapes and changes to Accounting
MAILS
  originals to company office
FILES
  cards and report/doctor's excuse

SUPPLEMENTARY STEPS: Compiles worksheet with employees name and data; Photocopies overtime sheets

EDUCATIONAL CUES

Statistical typing
Accuracy
Salary, policy manuals
Proofreading
Filing
Coding

PAYROLL CRITICAL INCIDENTS

"Once or twice her monthly tally of time sheets did not balance. This caused a great deal of recalculation along with taking time away from the Attendance Clerk who needed to search for the error along with her. This incident was probably the result of a posting error made because of the factor of tedium which enters in while doing many hours of posting figures."

"On a rare occasion, errors in pay rate have caused differences between the computer records and worker's records. Last month in setting up the computer, the accounting department found that an error had been recorded by the worker on the pay rate sheet. She had to recheck the social security number and the pay rate for three or four people to straighten out the error. The error occurred because she had not checked her pay rate change records carefully."

"An error in payroll rates can upset other employees and entire payroll amounts. One particular day when this employee was upset about a personal problem, he made such an error. In order to correct the error, much time was involved in discussions with foremen, computer staff, etc. These instances are rare and the employee was even more upset by his error."

"One time she sorted the time cards by the wrong department and one person did not get his check on time."

"The labor job classification deals with eight digit number; each digit standing for a different part of the job. The worker must be familiar with the entire job to know what all the digits mean. He once wrote the wrong classification on a batch of time cards because he did not understand the job."

"Last week the worker misplaced a packet of time cards from the Billing and Cable Department. After searching through all the cards for three days, he found the cards in the bin for cards that had already been paid. This carelessness caused the worker to have to ignore his normal duties to find the misplaced cards."

"One of the employees who had been injured returned to work and was still receiving workman's compensation checks. The worker forgot to notify the compensation attorney that the man had returned to work."

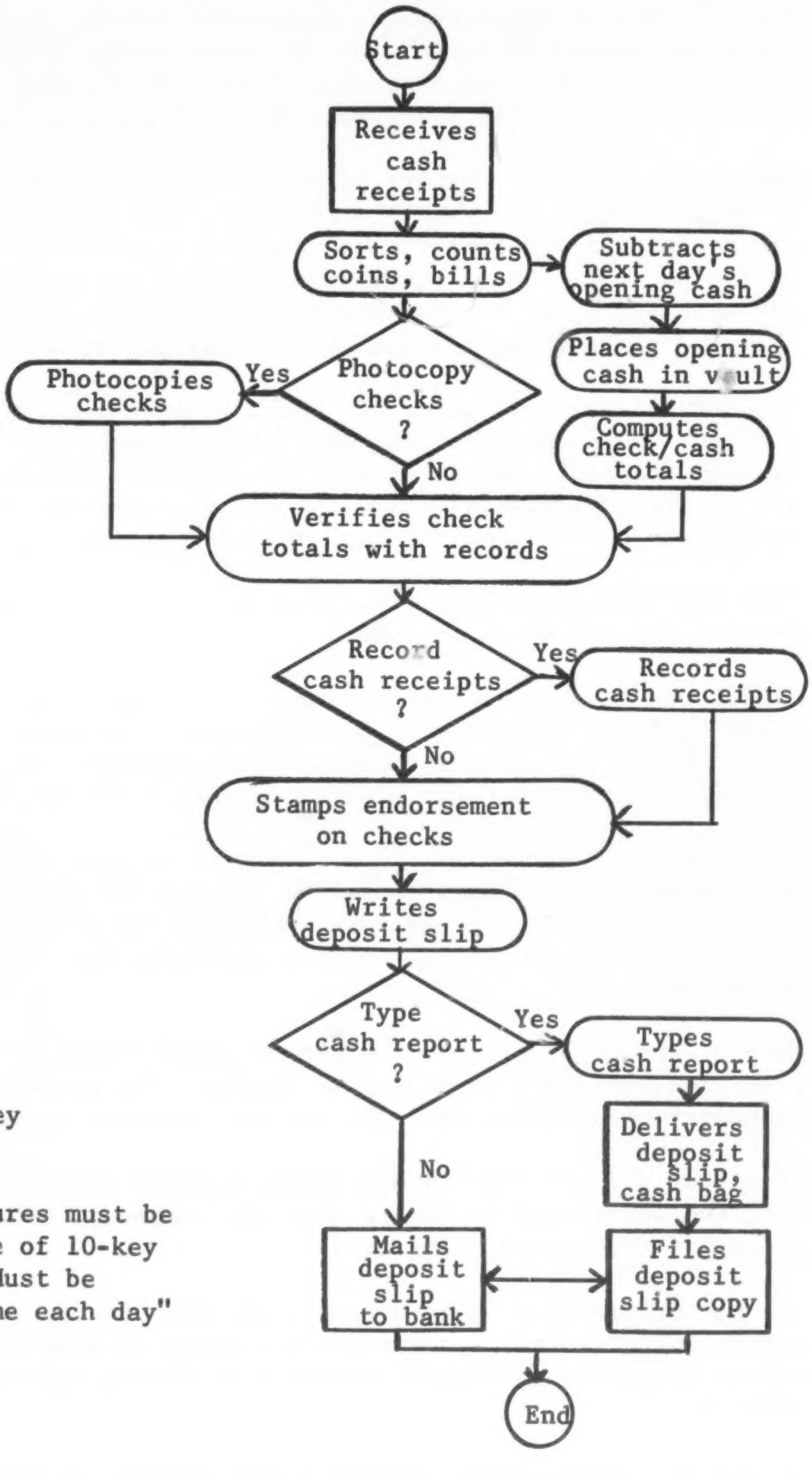
"A worker did not turn in his weekly payroll time card. Our worker assumed that the worker was no longer with the company; therefore, she didn't follow up to get the missing time card."

"In her willingness to be helpful, she didn't stop to think what she was really doing or the consequences for doing it when she gave payroll information to people she wasn't supposed to during our negotiations with the union."

"A special investigator requested that someone be assigned to help him in checking payroll books that date back as far as five years. The worker received a commendation from him for being so helpful and cooperative."

1.3 ACCOUNTING, RECEIPTS

1. GIVEN CASH RECEIPTS, THE WORKER PREPARES THE BANK DEPOSIT. (27 task sheets)


Start
Receives cash receipts
Sorts, counts coins, bills
Subtracts next day's opening cash
Places opening cash in vault
Computes check/cash totals
Photocopy checks ?
Yes
No
Photocopies checks
Verifies check totals with records
Record cash receipts ?
Yes
No
Records cash receipts
Stamps endorsement on checks
Writes deposit slip
Type cash report ?
Yes
No
Types cash report
Delivers deposit slip, cash bag
Mails deposit slip to bank
Files deposit slip copy
End

HARDWARE

Coins
Adding machine
Coin machine
Coin wrapping machine
Typewriter
Calculator
Photocopy machine
Endorsement stamp

SOFTWARE

Checks and bills
Deposit slips
Invoices
Cash receipts journal
Bank money bag

EDUCATIONAL CUES

Computational skills
Accuracy in handling money
Typing

REPORTED CRITERIA: "Figures must be accurate; Accuracy in use of 10-key adding machine; Honest; Must be completed at specific time each day"

ACQUISITION

RECEIVES
  cash and checks/employee deposit slips/money sheets

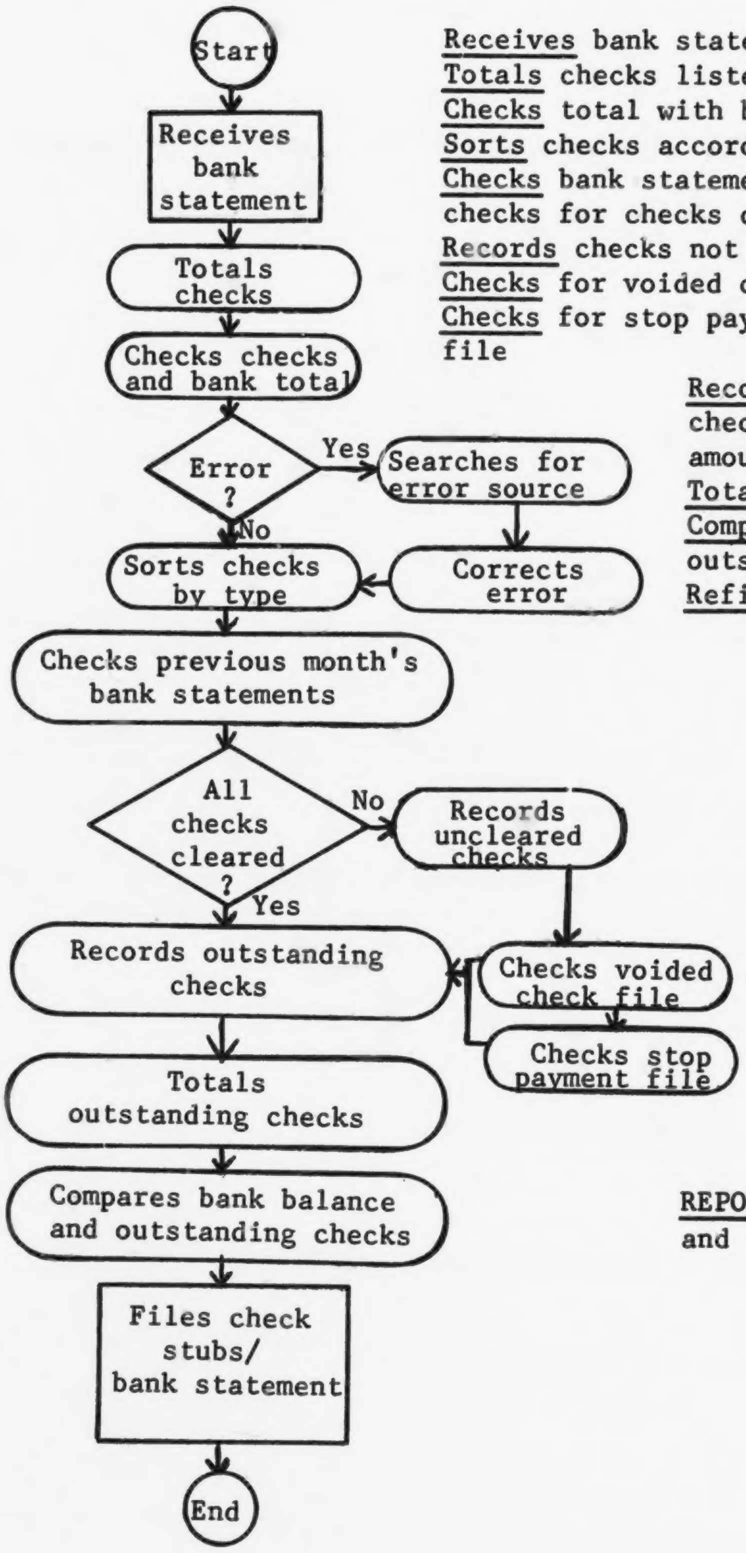
PROCESS

SORTS
  (and wraps) coins by denomination on coin machine/checks into alphabetical order
Counts
  cash
Subtracts
  money needed to carry on following day's business
Photocopies
  checks
CHECKS
  checks to make sure they are signed and endorsed properly/bank reconciliation
Verifies
  totals of checks with totals in cash receipts journal/with total of paid invoices
Pulls
  unpaid invoices
RECORDS
  cash and checks in cash receipts journal/cash record book/balance sheet
Writes
  bank deposit slip/cash total on bank bag slip
Stamps
  checks with rubber endorsement stamp/date on invoices when payment received
TYPES
  cash report indicating amount of cash and checks received
COMPUTES
  totals of columns in cash receipts journal/totals of checks/totals of invoices paid

DISPOSITION

DELIVERS
  deposit to bank/co-worker
Places
  deposit in bank bag for pick-up by messenger boy/money for next day in cash drawer in vault
MAILS
  deposit and deposit slip to bank for deposit
FILES
  carbon copy of deposit slip

2. GIVEN BANK STATEMENTS AND CHECKS, THE WORKER RECONCILES BANK STATEMENT. (8 task sheets)


Start
Receives bank statement
Totals checks
Checks checks and bank total
Error ?
Yes
Searches for error source
Corrects error
No
Sorts checks by type
Checks previous month's bank statements
All checks cleared ?
No
Records uncleared checks
Yes
Records outstanding checks
Checks voided check file
Checks stop payment file
Totals outstanding checks
Compares bank balance and outstanding checks
Files check stubs/ bank statement
End

Receives bank statements
Totals checks listed on statement/check register
Checks total with bank's total
Sorts checks according to type of check
Checks bank statement of previous month with checks for checks cleared during present month
Records checks not cleared bank
Checks for voided checks in voided check file
Checks for stop payment checks in stop payment file

Records outstanding checks by check number, date of check, and amount
Totals outstanding checks
Compares bank balance and total of outstanding checks
Refiles check stub/bank statement

HARDWARE

Adding machine (10-key)

SOFTWARE

Bank reconciliation statements
Checks

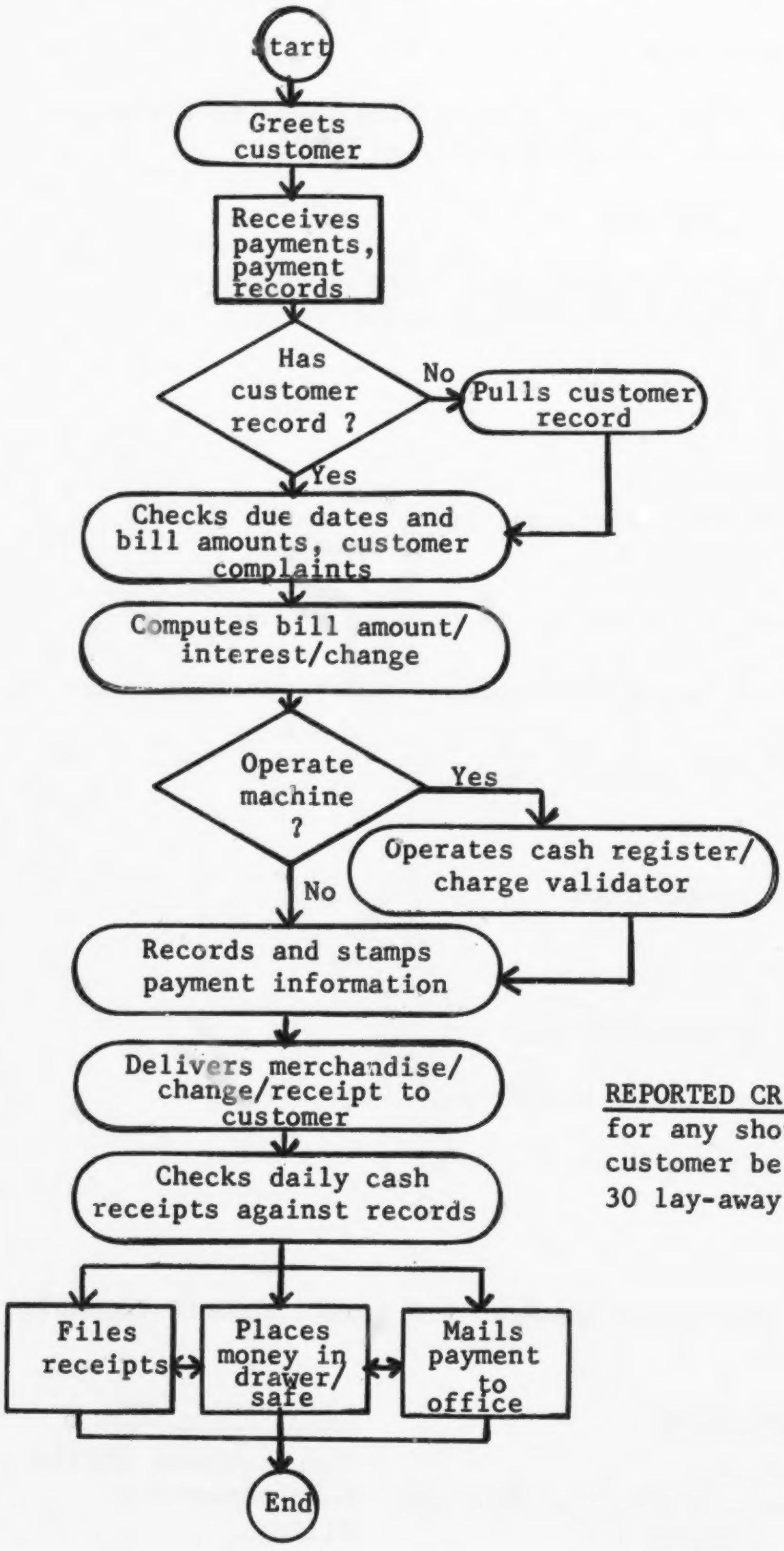
EDUCATIONAL CUES

Filing
Computational skills

REPORTED CRITERIA: "Efficiency and accuracy are critical"

3

3. GIVEN CUSTOMERS WISHING TO MAKE PAYMENTS, THE WORKER RECEIVES PAYMENTS OVER THE COUNTER. (20 task sheets)


Start
Greets customer
Receives payments, payment records
Has customer record ?
No
Pulls customer record
Yes
Checks due dates and bill amounts, customer complaints
Computes bill amount/ interest/change
Operate machine ?
Yes
Operates cash register/ charge validator
No
Records and stamps payment information
Delivers merchandise/ change/receipt to customer
Checks daily cash receipts against records
Files receipts
Places money in drawer/ safe
Mails payment to office
End

HARDWARE

Cash register
Calculator
Adding machine
Typewriter
Posting machine
Charge plate validation machine

SOFTWARE

Customer record books
Company record books
Cash receipts
Merchandise (lay-away items)

EDUCATIONAL CUES

Accuracy in handling money
Computational skills
Courtesy in dealing with customers
Filing
Typing

REPORTED CRITERIA: "Worker must account for any shortages; Essential that customer be greeted immediately; Averages 30 lay-away transactions daily"

ACQUISITION

Greets
  customers
Pulls
  customer record card/office bill copy
RECEIVES
  payments/change bag/COD sales slips/coupon payment books/loan book/charge plate/lay-away tickets/ads/utility bills/classified ad bills

PROCESS

CHECKS
  amount of bill with due date and amount of money received/previous computations on bill/customer complaints on bill amounts
COMPUTES
  net and gross amount of bill/interest due
Subtracts
  interest from total payment
Counts
  change drawer/payment received/customer change twice to self, once to customer
OPERATES
  cash register/charge plate validation machine
RECORDS
  payment information on customer record book/company record/punched card
Stamps
  bill "paid"/customers premium book
Writes
  (or types) customer receipt

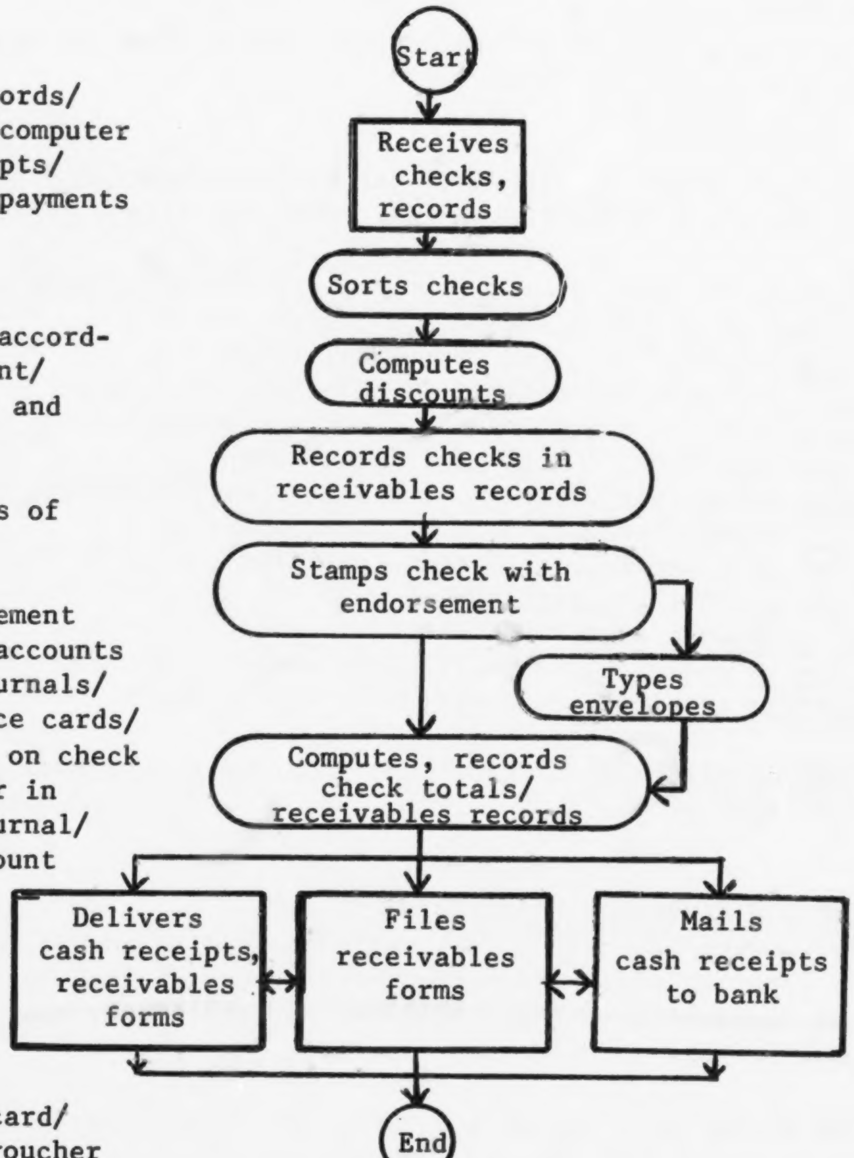
DISPOSITION

FILES
  record card/receipt
DELIVERS
  merchandise (lay-away items) to customer
Returns
  record book, receipt, and change to customer/change bag to safe
Places
  money in drawer/locked box/cash register
MAILS
  payment to home office

4. GIVEN CHECKS AND ACCOUNTS RECEIVABLE RECORDS, THE WORKER RECORDS PAYMENTS RECEIVED. (17 task sheets)

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Mechanical letter opener	Checks	Computational skills
Adding machine	Receivables journals and ledgers	Good penmanship
Typewriter	Receivables forms and envelopes	Filing
Register		Typing
Accounting machine		
Company name stamp		

REPORTED CRITERIA: "60 entries an hour; Handles 5000 payments a month"


Start
Receives checks, records
Sorts checks
Computes discounts
Records checks in receivables records
Stamps check with endorsement
Types envelopes
Computes, records check totals/ receivables records
Delivers cash receipts, receivables forms
Files receivables forms
Mails cash receipts to bank
End

ACQUISITION

RECEIVES
  cash receipts/cash records/punched account cards/computer printout on cash receipts/overpayments/past-due payments

PROCESS

SORTS
  checks alphabetically/according to method of payment/punched cards into bad and good accounts
COMPUTES
  total of checks/amounts of discounts
RECORDS
  checks in cash disbursement journal/cash receipts/accounts receivable ledgers, journals/cash slips/sales invoice cards/page number of journal on check as it is posted/voucher in accounts receivable journal/cash on customer's account sheet/customer's file card/cash receipts on cash voucher form/cash receipts/COD checks on sales invoice cards by running through cash receipts register/overpayment as customer credit
Stamps
  each check with company stamp
TYPES
  envelopes for forwarding checks
COMPUTES
  balance of each page of journal as it is completed/number of sales invoice cards processed and number of checks/totals of credit slips for each salesman

DISPOSITION

FILES
  vouchers numerically in journal/copy of cash receipts form in cash receipts file/accounts receivable ledger

MAILS
  checks and cash receipts and form to bank
DELIVERS
  cash slips, checks, credit slips, adding machine tape to Bookkeeping/Keypunching/co-worker

5. GIVEN CHECK-OUT REQUESTS AND LATE AND LOST BOOK NOTICES, THE WORKER PROCESSES MONEY FOR LIBRARY BOOKS AND FILMS. (3 task sheets)

Receives price slips for lost books/request to check out films
Matches price slips and charge cards
Computes amount of fine for library book
Types replacement cost bill/booking slip for film
Sends bill to student with form letter and bill copy to cashier
Files bill copy, charge card, price slip
Types dummy charge card to indicate book loss to library patrons
Files dummy charge card in missing book file
Receives fines/insurance money for film
Transfers bill to paid box
Balances cash register weekly
Delivers money to cashier/film to shelf
Receives receipt for money

REPORTED CRITERIA: "Checks out 35 films a day; Must be effective in dealing with irate people"

RECEIPTS CRITICAL INCIDENTS
"The worker added up a customer's classified ad bill, rang the amount up on the cash register, and handed over a receipt--neglecting to receive payment from the customer. The following day the worker realized a shortage in cash funds and had to determine the error."

"The worker once couldn't balance her cash receipts at the end of the day and had to write that she was $15.00 short on the tape. After we received the bank deposit slip from the bank the next day, we found what had happened. She had counted $10.00 worth of quarters but had recorded it on the tape as $25.00 because she was thinking of the number 25 pertaining to quarters."

1.4 ACCOUNTING, DISBURSEMENTS

1. GIVEN REQUESTS FOR PAYMENTS, THE WORKER DISBURSES FUNDS. (11 task sheets)

ACQUISITION

- Greets
  - patient/employee
- RECEIVES
  - check requisition/driver request for expense money/scholarship checks/warrants/checks/cash, tills and money bags
- Pulls
  - file of insurance check recipient

PROCESS

- RECORDS
  - amount desired on form/amounts paid out/approval of payment/check numbers and dates in check register/employees names as cash-drawer or money-bag recipients
- OPERATES
  - check-signer machine
- Requests
  - approval of funds/blank check from Accounting for requisition/signature of supervisor on check
- CHECKS
  - signature on account card/balance in requesting department's account/number of checks processed on check-signer machine/dates of employee disability/till and money bag contents
- COMPUTES
  - totals of monthly disbursements
- COMPILES
  - disbursements worksheet daily

DISPOSITION

- DELIVERS
  - check to driver/to scholarship holders/funds to employee/tills and money bags to employees
- MAILS
  - insurance checks to recipients/check form requests to main office/checks for buying stock
- Wires
  - money to driver
- FILES
  - tuition refund forms/insurance statement in employee folder/copy of check requisition

HARDWARE

Adding machine
Typewriter
Check-signer machine
Telautograph machine
Cash drawers (tills)

SOFTWARE

Requisitions for funds
Cash and checks
Money bags
Insurance forms
Disbursement records

EDUCATIONAL CUES

Recording and checking skills
Typing
Filing
Computational skills

REPORTED CRITERIA: "Checks must be typed accurately; Time pressure"

2. GIVEN A REQUEST FOR MONEY, THE WORKER DISBURSES PETTY CASH FUNDS. (4 task sheets)

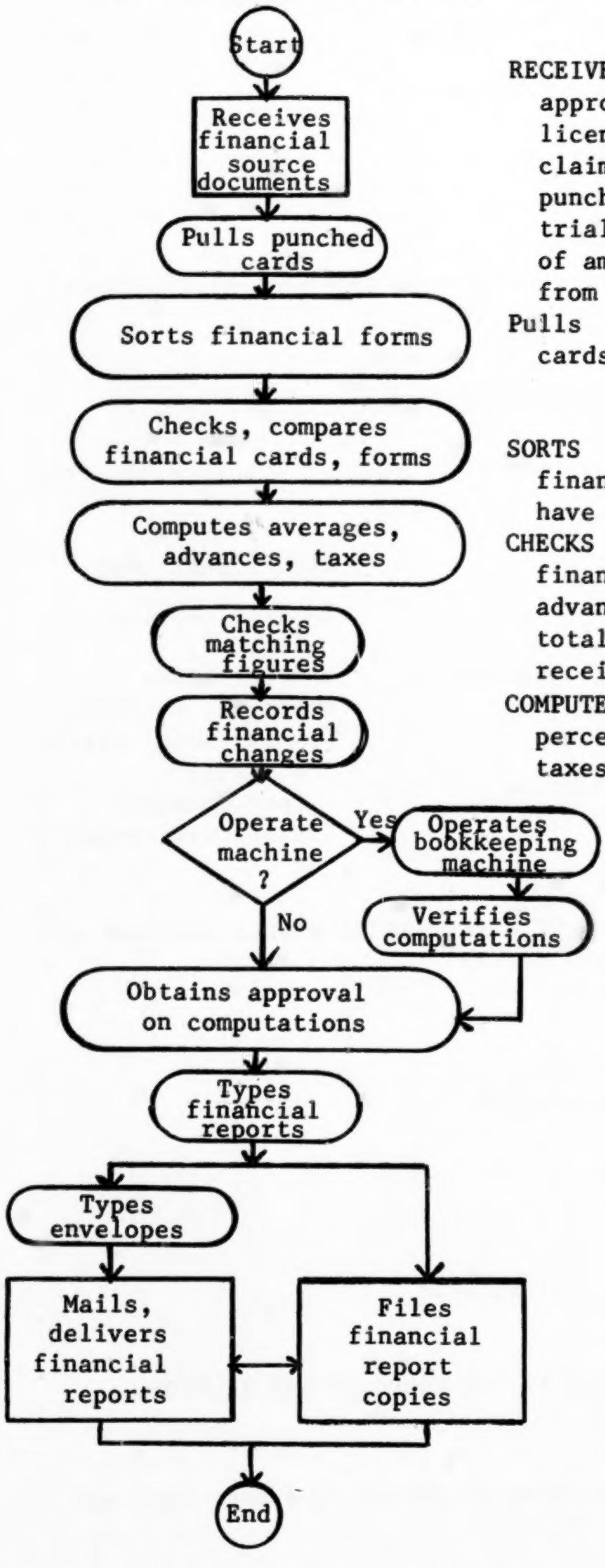
Receives request for money/petty cash box
Records amount disbursed on company form/petty cash form
Writes out request slip for petty cash
Writes checks
Checks to make sure that petty cash bag contains specified amount of money
Requests approval of disbursement of funds on telautograph machine
Delivers checks/cash to person requesting it
Files copy of petty cash form
Counts cash at end of day and balances with disbursement vouchers
Types check for reimbursement of petty cash fund
Mails check to main company office

DISBURSEMENTS CRITICAL INCIDENT

"We had an exceptionally large volume of cash disbursements just the other day. I didn't have to void one check for her. She is a person that pays attention to the detail of her job."

1.5 ACCOUNTING, FINANCIAL ENTRIES

1. GIVEN FINANCIAL SCHEDULES, LICENSE FEE FORMS, AND DAMAGE CLAIMS, THE WORKER COMPUTES AND RECORDS DATA IN FINANCIAL REPORTS. (28 task sheets)


Start
Receives financial source documents
Pulls punched cards
Sorts financial forms
Checks, compares financial cards, forms
Computes averages, advances, taxes
Checks matching figures
Records financial changes
Operate machine ?
Yes
Operates bookkeeping machine
Verifies computations
No
Obtains approval on computations
Types financial reports
Types envelopes
Mails, delivers financial reports
Files financial report copies
End

ACQUISITION

RECEIVES
  appropriation, depreciation schedules/ license fee forms/shortage forms/damage claims/corrections from various offices/ punched cards/field company general ledger/ trial balance printout/tax receipts, tape of amount/payments from borrowers, loans from banks/cancellation forms
Pulls
  cards from file

PROCESS

SORTS
  financial forms/determines accounts which have reached time, amount limit
CHECKS
  financial cards, forms/arrears, amounts advanced/assets, liabilities/paid items/ total cards to see if they match total receipts
COMPUTES
  percentages/weekly averages/advances/ taxes
Counts
  financial cards, forms making sure there is one card for each form
Totals
  accounting at end of the month/ punched cards amounts
Reconciles
  control sheet
RECORDS
  account changes in appropriations ledgers/transfers of balances from source document to notebook/ items on forms such as production, quantities, part numbers, figures or information on control sheets, ledgers, and journal entry sheets/ amounts advanced/separate list for income tax report/monthly collections/amounts on worksheets/ corrections and changes in ledger
Stamps
  date paid in tax book, receipt
OPERATES
  bookkeeping machine

Verifies
  bookkeeping machine figures
Obtains
  signatures/approval of calculator operator/supervisor
TYPES
  reports/invoices/numbers, data on forms/envelopes

DISPOSITION

DELIVERS
  report
Sends
  report for checking/punched cards to Data Processing/financial statements
MAILS
  reports
FILES
  report copies/punched cards by lot, block number/tax receipts by data

SUPPLEMENTARY STEPS: Takes trial balance monthly, yearly; Compiles construction estimate

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Forms, cards	Care in copying figures
Bookkeeping machine	Receipts	Concentration
Calculator	Financial schedules	Neatness, checking
Typewriter	License fee forms	Computational skills accuracy (percentages)
	Damage claims	Statistical typing

REPORTED CRITERIA: "Be persistent in looking for errors; Attention to detail; Write legibly"

2. GIVEN INTERNAL ACCOUNTS TO CONTROL, THE WORKER POSTS MONIES RECEIVED AND SPENT AND BALANCES ACCOUNTS. (1 task sheet)

Records all money received as a debit
Places money in safe
Writes all checks requested
Records a credit in accounts for checks written
Writes receipts weekly
Counts cash twice weekly
Delivers money to bank twice weekly
Reconciles ledger monthly
Posts account balances monthly
Attaches stencil to record balances for all accounts

3. GIVEN TRANSFER FORMS, THE WORKER ADJUSTS THE PROPERTY TAX RECORDS. (1 task sheet)

Receives transfer forms in mail
Records in red ink the new owner's name, address change, and date deed was filed on the tax roll in book

Pulls card from file
Records on card new data on new owner
Removes name, address of old owner
Files card alphabetically by new owner
Obtains signature of property assessor
Completes form in ink to send to Data Processing to cut a new card
Delivers form to Data Processing
Files transfer form by lot and block

4. GIVEN FINANCIAL REPORTS/PROFIT, LOSS STATEMENTS/ADJUSTING, AND NEW DATA, THE WORKER COMPLETES FINANCIAL REPORTS. (26 task sheets)

ACQUISITION

RECEIVES
  revenue sheets/adding machine tape/invoices/report of orders/printout of supplies/inventory adjustment sheet/credit requisitions/out-of-state sales tax/rough draft/handwritten financial report copy/financial reports, statements, man hour reports

PROCESS

CHECKS
  financial documents for completeness/every fifieth freight bill number/advertisements/figures
Proofreads
  typewritten materials
CALLS
  shipping clerk for shipment information
COMPLETES
  worksheet
Devises
  new design report table
Pulls
  previous month's report/copy of budget
COMPUTES
  totals of debits and credits/percentages of past due and excessive credit reports
RECORDS
  bill number and weight/amounts owing, paid
Writes
  deposit slip
RECEIVES
  random selection audit
Obtains
  signature/approval of supervisor
TYPES
  financial statement/report/profit, loss statement/address labels/envelopes
DUPLICATES
  financial reports/statements

DISPOSITION

DELIVERS
  worksheet/envelopes/financial report to supervisor at end of month/to typist
Distributes
  financial reports/accounting statements/profit, loss statements/freight charge report
FILES
  copy of report/copies of financial documents, forms
MAILS
  financial reports

SUPPLEMENTARY STEP: Binds report according to month of year

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Credit, tax forms	Checking
Typewriter	Adding machine tape	Statistical typing
Rotary calculator	Deposit slips	Accuracy
Duplicator	Financial reports, worksheets	Proofreading
	Invoices	
	Adjustment sheets	

REPORTED CRITERIA: "Should have the ability to type a financial statement in about one hour; Work under pressure; Great deal of concentration and neatness and legibility of handwriting; Must have accounting knowledge and experience; Able to evaluate profit and loss statements"

FINANCIAL ENTRIES CRITICAL INCIDENTS

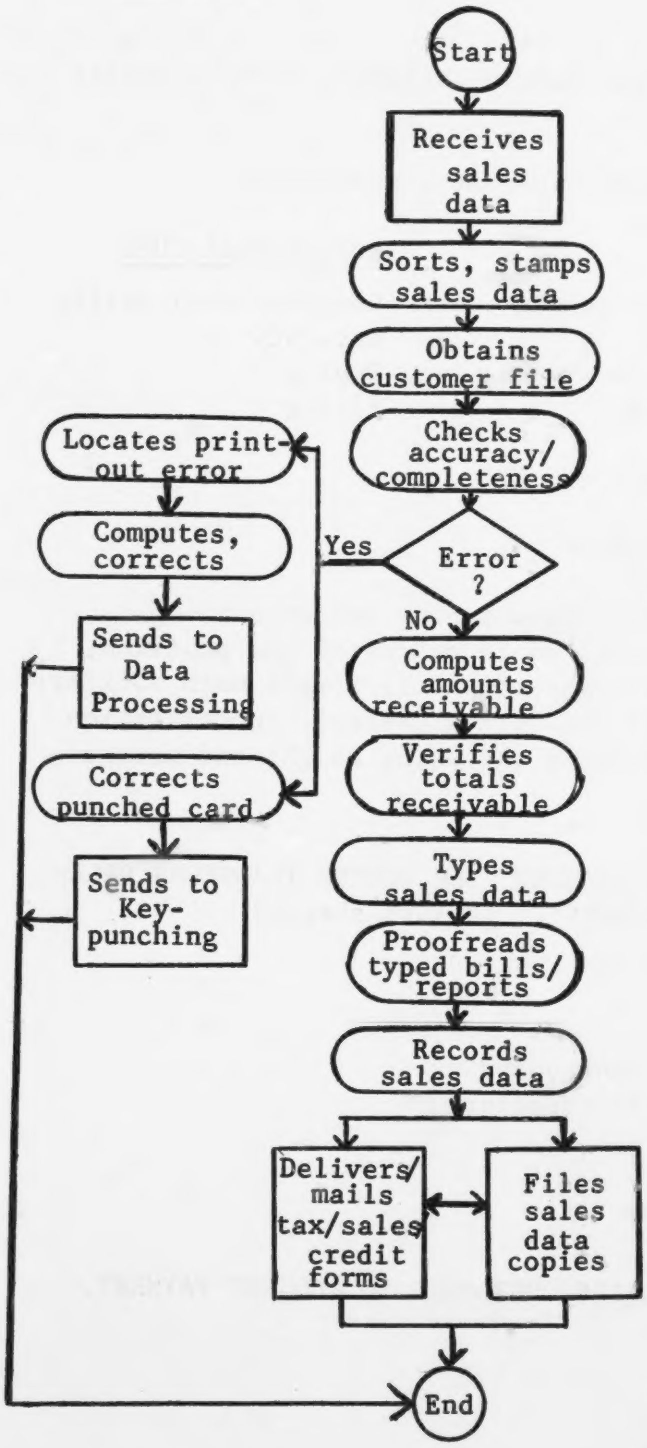
"The supervisor conducted a study unknown to the girls in his department of the transactions the girls were posting on posting machines. This worker ranked second. Her accuracy was unusally high. If the worker does not know or understand something, she will ask the supervisor."

"We do a lot of money exchanging with the bank in the forms of loans for short periods of time. The worker failed to post some very important information in her journals and we ended up borrowing $100,000 more than we should have. The error was soon caught but we still had to pay some interest on the money that was credited to our account by the bank."

"A former employee could not trace errors and could not balance accounts. He could not follow through. He had a good school background, but he lacked imagination as to why a shortage had occured or why figures would not balance. He lacked the ability to be aware of possibilities of errors. He did not recognize the types of mistake that caused errors. The company fired him because of too many mistakes."

1.6 ACCOUNTING, ACCOUNTS RECEIVABLE (SALES ACCOUNTING)

1. GIVEN DOCUMENTS SUCH AS SALES SLIPS, INVOICES, COMPUTER PRINTOUTS, THE WORKER COMPUTES BILLING AND SALES FOR ACCOUNTS RECEIVABLE. (38 task sheets)


Start
Receives sales data
Sorts, stamps sales data
Obtains customer file
Checks accuracy/ completeness
Error ?
Yes
No
Locates print-out error
Computes, corrects
Sends to Data Processing
Corrects punched card
Sends to Key-punching
Computes amounts receivable
Verifies totals receivable
Types sales data
Proofreads typed bills/ reports
Records sales data
Delivers/ mails tax/sales credit forms
Files sales data copies
End

ACQUISITION

RECEIVES
customer and weekly sales/price agreement number/remittance slips/contracts/chain store slips/invoices/computer sheets/requisitions/ledgers/sales work sheets/daily settlement sheets/sales records and disbursements/partial shipment tickets/tax forms/call tickets/order cards

PROCESS

SORTS
according to route/alphabet/number/by type of telephone call/requisitions/cards by dates

Stamps
date/number/paid/charge/amount on order

Obtains
file on customer

CHECKS
for accuracy/due date/order numbers, addresses/codes/listed items for completeness/expiration data/prices

COMPUTES
sales ticket amounts/total deposits, collections/price differences/discount, sales tax/number minutes on call ticket/percentages of discount/extensions/profit/weights/charges

Verifies
totals on computer sheets, work sheets/territories of salesmen

TYPES
invoices/account numbers/manifest/amounts on wholesale form/profit sheet/sales order forms/report of accounts receivable

Proofreads
typewritten material

RECORDS
totals on cash report form/cash sales/charge sales/each customer's balance/taxes/charge sales/payments/discount/expiration date/code number of items sold

DISPOSITION

FILES
  order to stop ad/copy of sales ticket and manifest/tax form/wholesale form
MAILS
  original copy of tax form to state
DELIVERS
  to supervisor computer sheet/call tickets/partial shipment tickets/credit forms/summary sheets

SUPPLEMENTARY STEPS: Batches call tickets; Duplicates statements

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Accounts receivable documents	Computational skills
Bookkeeping machine	Adding machine tapes	Accuracy
Calculator	Sales tickets	Typing
	Code book	Filing
	Weight, measurement tables	
	Books, magazines	

REPORTED CRITERIA: "A general knowledge of bookkeeping and accounting terminology is most helpful in early adaptation to nature of the position; Minimum bookkeeping ability; Absolute accuracy required; Simple math ability; Must understand rules and regulations for each state (rates), concentration in using figures; Legible handwriting; Reading and using weight and measurement tables"

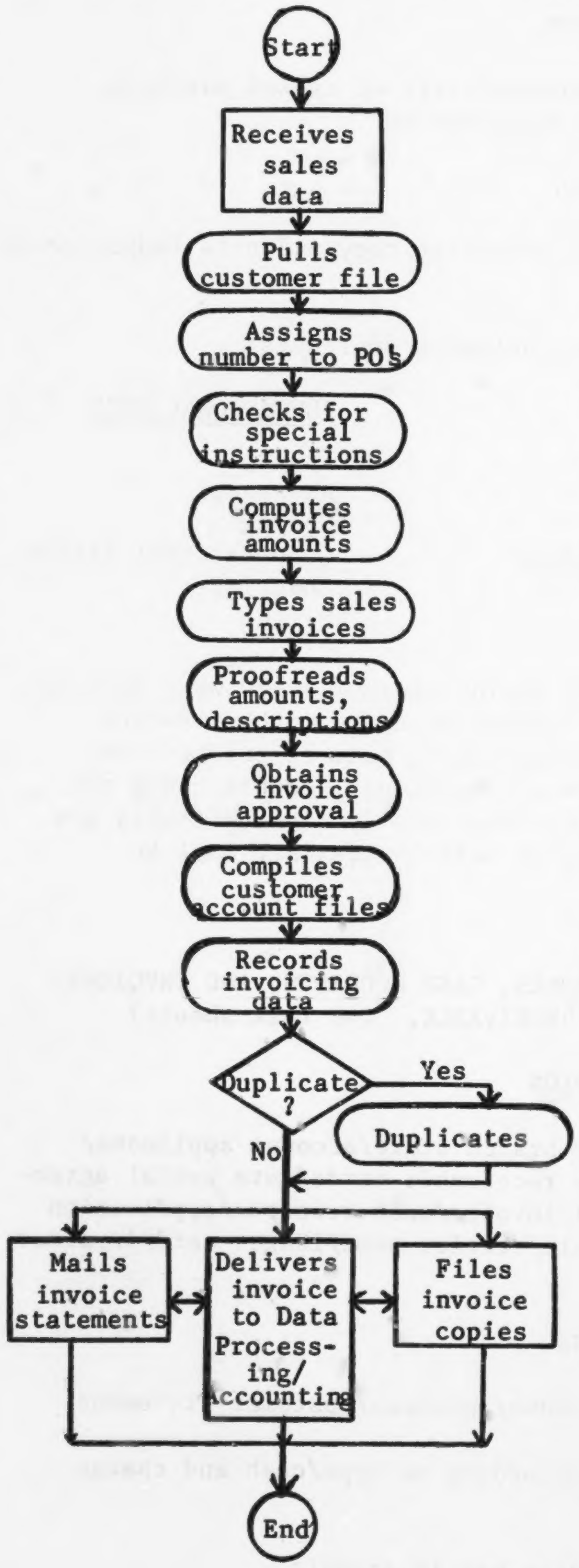
2. GIVEN NOTICE THAT ACCOUNT STATUS HAS CHANGED, THE WORKER TRANSFERS BILLING RECORDS OR REFERS TO CLAIMS DEPARTMENT. (2 task sheets)

Receives call/notice that account status has changed
Checks records to see if service is off
Checks status of account
Completes turn-off order if dwelling is unoccupied
Sends collection records and code order to supplier
Receives notices from supplier
Computes bill for estate settlement
Types new bill for new owner of estate

3. GIVEN OVERDUE ACCOUNTS, THE WORKER CALLS CUSTOMERS TO REQUEST PAYMENT. (4 task sheets)

Receives list of overdue accounts
Pulls customer file
Calls customer
Requests promise to pay
Informs customer of importance of good credit rating
Records call information and date made
Determines success or failure of call
Files customer account
Delivers account to collection agency if unsuccessful on call

4. GIVEN BILLING INFORMATION SUCH AS SALES TICKETS, CONTRACTS, RECEIVING REPORTS, THE WORKER TYPES INVOICES. (49 task sheets)


Start
Receives sales data
Pulls customer file
Assigns number to PO's
Checks for special instructions
Computes invoice amounts
Types sales invoices
Proofreads amounts, descriptions
Obtains invoice approval
Compiles customer account files
Records invoicing data
Duplicate ?
Yes
No
Duplicates
Mails invoice statements
Delivers invoice to Data Processing/Accounting
Files invoice copies
End

ACQUISITION

RECEIVES
shipment forms/meter reading card/ sales tickets/catalog order/purchase orders/special accounts/repair papers/ contracts/change slips/invoices/ request forms/list of accounts due/ request for information/ledger sheets/ manifest/bills of lading/receiving report

PROCESS

Pulls
account ledger card/inventory book

Codes
special accounts

Assigns
number to purchase orders

CHECKS
file/for special marking or instructions/correct billing date/price chart/cancelled check if customer claims payment/cost/amounts/receiving reports if material is in inventory book

COMPUTES
charges for ads/commissions/discount date/amounts for invoice/costs for repair

TYPES
statement/invoices/unclaimed statements/ account due forms/shipping information/ changes on account ledger card/revenue amounts on forms

Proofreads
invoices for completeness, accuracy

Obtains
invoice approval from supervisor

SORTS
according to contract and non-contract customers/shipping manifest

COMPILES
files for customer account/bills of lading/invoices/statement, customer file

RECORDS
mailing of repaired item in inventory book/initials/unclaimed statement/ whether material is in inventory/ numbers on meter cards

DUPLICATES
purchase orders/contracts/requisitions

DISPOSITION

DELIVERS
to filer/Accounting/to bookkeeper for refunds/lists of closed purchase orders to Data Processing/meter cards to Keypunching
MAILS
invoices daily/statements at end of month
FILES
customer folder/final order form by number/invoice copy/accounts ledger card/meter cards/punched cards

SUPPLEMENTARY STEP: Photocopies bills for customers on request

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Code book	Typing
Hand stamp	Price charts	Accuracy
Addressograph machine	Invoices	Coding
Duplicator	Bills of lading	Computational skills
		Checking
		Filing

REPORTED CRITERIA: "Types bill correctly; Typing minimum 40-50 wpm; Accuracy in math; Flexibility demanded to perform unfamiliar tasks without panic; 100 percent accuracy required; Books balance; Typing must be correct--no abbreviations, addresses must be correct--no misspellings, double check all amounts; Correct invoice reaches correct customer destination; Mistakes are costly and annoying to customers; Accuracy of detail; Customer must be pleased"

5. GIVEN DOCUMENTS SUCH AS SALESMEN'S ORDERS, CASH RECEIPTS, AND INVOICES, THE WORKER RECORDS AND POSTS ACCOUNT RECEIVABLE. (48 task sheets)

ACQUISITION

RECEIVES
transfer of customer account to another branch store/account applicant/cards noting repairs completed/accounts receivable cards/auto rental agreement/salesmen's report/sales and rental invoice/cash receipts/application for service/punched cards/service tickets/carrier name/ledger card/invoices and credit memos/charge tickets

PROCESS

Pulls
corresponding order/customer ledger account/invoices/customer statement
SORTS
orders/cards/service tickets/invoices according to type/cash and charge tickets/sales sheets
Codes
checks/forms/by number of days merchandise was in transit

CHECKS
accuracy of totals/all figures by running tape/cards/extensions on tickets/all information for correctness
Stamps
date on customer order/initials on invoice/date on invoice/check with endorsement stamp
RECORDS
amounts of item sold/customer data on account card/date and quantity on contract/shipping data on contract/all shipments/amounts due on repair/extensions/sales by departments/information on profit and loss statement/serial numbers of items/codes/date and number of invoice/type of purchase/new balances/completed repairs/amounts received/applicant information/total number and types of documents received/date of payment
COMPUTES
grand totals/number of items shipped
TYPES
customer account ledger card/carrier data on form/list of unshipped orders/maintenance form from customer orders/list of payments for clients by name/list of checks/receipts
CHECKS
all figures to make sure they balance, total with daily sales report, by running tape
Posts
service tickets to ledger cards/new balances/cash receipts/invoices/daily orders/daily shipments/sales rental fee/data from detail sheets/payments

DISPOSITION

DELIVERS
transmittal sheet to Data Processing/copy of account transfer to Bookkeeping/money to box/report forms/repair cards to Billing
FILES
order cards numerically/service tickets/ledger sheet/posted invoices and credit memos/completed customer orders/journal sheet/accounts receivable cards/application for investigation later
MAILS
invoices and credit memos/statements/receipt to customer

SUPPLEMENTARY STEP: Photocopies meter cards

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Account code books	Typing
Adding machine (10-key)	Ledger cards	Duplicating
Duplicator	Invoices	Computational skills
Bookkeeping/posting/ billing machines	Sales reports	Accuracy
	Correction tickets	Checking
Hand stamp	Tax forms	Coding
Calculator	Sales receipts	Filing

REPORTED CRITERIA: "All figures are correctly recorded; Totals balance; Average typing ability of approximately 40 wpm; Legible handwriting; Bookkeeping machine time is at a premium sc speed is essential; Ability to operate an accounting machine accurately and quicly; Must post accurately; Accuracy is more important than speed; Every computation double checked for accuracy purposes; Knowledge of operation of bookkeeping machine; Attention to detail"

6. GIVEN DELINQUENT ACCOUNTS, THE WORKER WRITES CUSTOMER TO OBTAIN PAYMENT PROMISE/ADVISE OF FURTHER ACTION. (27 task sheets)

ACQUISITION

RECEIVES
  past due notices/ledger cards/invoices, statements/part-payment accounts/list of overdue accounts/payments/oral instructions/cancelled check/bad check information/collection record and cards/non-payment cards/cut-off-service cards

PROCESS

Pulls
  overdue loan cards/delinquent records
COMPARES
  matched lists with cards
SORTS
  according to data/collection cards/unpaid ads
CHECKS
  notices with register book/work order with invoice/invoice for due date/payment overdue/daily for payments/address/collection code/history card/credit report
COMPILES
  list of past due accounts
Selects
  form letter
Writes
  amount past due/meter number on service copy/list of delinquents/new address on bill
CALLS
  delinquent customer to request payment
COMPUTES
  final date due/collection sheet totals
TYPES
  information from notice on non-payment card/composed, form letters for collection/overdue notices/list of those not reached by telephone
DUPLICATES
  death certificate/past due invoices/overdue loan cards/contract and auto title of bankrupt customer
Stamps
  date on card/company name on due notices

RECORDS

information on form showing balance due/new deadline date in follow-up book/telephone notice/sending of notice/amount and date paid on card

Obtains

notarization of bankruptcy forms

FILES

notices/work orders/copy of letter/payment reminders/loan cards, forms

MAILS

copy of death certificate to insurance company for collection of loan/nonpayment card/invoice copy to customer/collection sheets/letters/returned check to maker

DELIVERS

list of names to bookkeeper/payments to bookkeeper/notarized forms to lawyer/past due statements to supervisor/statement stubs to cashier/unmatched cards to Data Processing

SUPPLEMENTARY STEP: Arranges to extend due date for customer

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Account cards	Statistical typing
Adding machine (10-key)	Envelopes	Accuracy
Duplicator	Register book	Filing (numeric, alphabetic)
Hand stamp	Work orders	Checking
Files	Loan cards, forms	Communication skills
	Service notices	

REPORTED CRITERIA: "Use tact; Accept criticism for company; Distinguish between valid excuse and made-up excuse for not paying account; Accurate matching and records; Exercise ingenuity locating customers and tact to avoid antagonizing customers; Common sense and logic; Make judgments"

7. GIVEN QUESTIONS REGARDING BILLING ON INVOICES/BILLS OF LADING/PUNCHED CARDS, THE WORKER CHECKS ACCOUNTS RECEIVABLE DATA. (18 task sheets)

ACQUISITION

RECEIVES

billings invoices, punched cards, bills of lading, requests by telephone for quoted price, numerical card on loan, work orders

PROCESS

Pulls

shipping tickets with bills of lading attached/original invoice/file of externally discovered errors/service contracts

CHECKS

printout sheets/card information/accruals/shipping data/work order against service contract amounts/prices/files for amount paid/to identify checks received/tickets for defects/shipping tickets against billing invoices for accuracy/bills of lading with original invoice/statement with invoice/for error

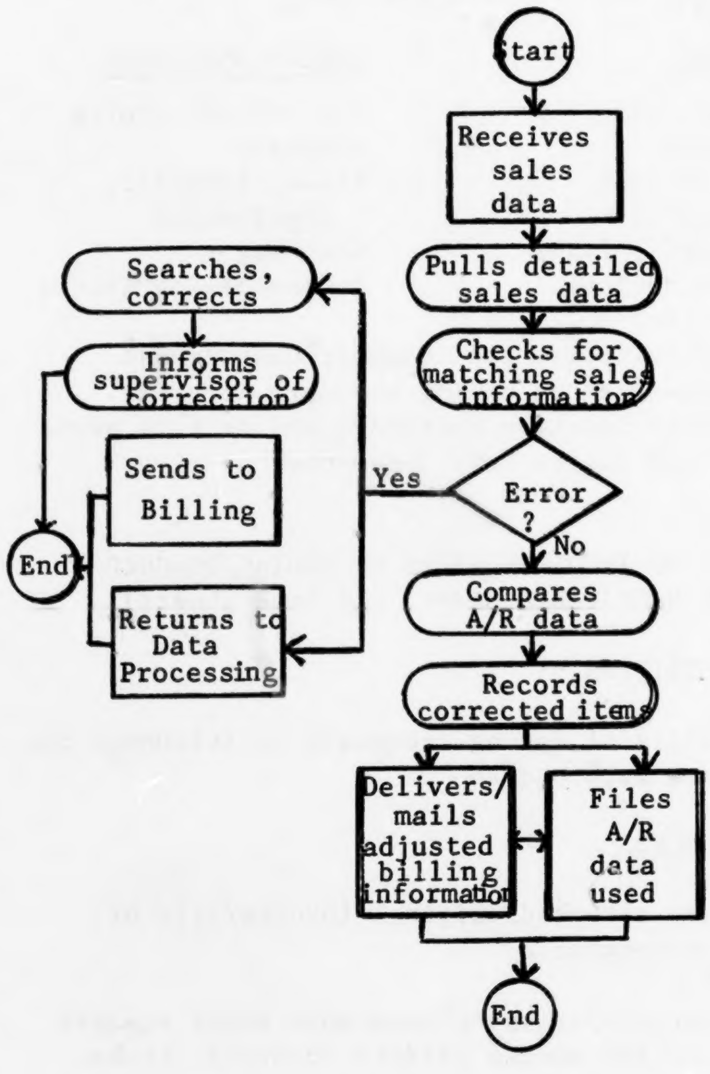
SORTS

invoices/bills of lading/shipping tickets

COMPARES
billing statement to original invoice/information on customer on card/metal tag to statement if amount is excessive
RECORDS
total figures from purchase orders in account book/work done/notes on items not included in contract

DISPOSITION

FILES
copy of invoice/shipping tickets/copy of billing statement/posted loan sheet
MAILS
original invoice to customer
DELIVERS
punched cards, invoices to Data Processing/copy of invoice to Marketing/ statements to supervisor/to Service all information caller gives regarding account


Start
Receives sales data
Pulls detailed sales data
Checks for matching sales information
Error ?
Yes
No
Searches, corrects
Informs supervisor of correction
Sends to Billing
Returns to Data Processing
End
Compares A/R data
Records corrected items
Delivers/ mails adjusted billing information
Files A/R data used
End

HARDWARE

Files

SOFTWARE

Account cards
Metal tag
Procedures manual
Invoices, bills of lading
Shipping tickets
Punched cards

EUCATIONAL CUES

Checking
Accuracy
Filing
Follow-through on pricing policy

REPORTED CRITERIA: "All customers receive invoice showing correct amount owing; Accurate quotation on price of item; Billing must be processed by a certain date, therefore, there is time pressure; Accurate charges must be assessed; Follow procedures manual"

8. GIVEN DEPARTMENTAL REPORTS, PRINTOUTS, AND SALES SLIPS, THE WORKER COMPILES AND TYPES REPORTS AND RECAPS FOR ACCOUNTS RECEIVABLE. (12 task sheets)

ACQUISITION

RECEIVES
adding machine tape/report forms from salesmen/reports from departments and stores/sales slips and recap sheets/computer printouts

PROCESS

Pulls
collection sheets/summary report form of sales/reports
COMPILES
sales slips
SORTS
data on collections
CHECKS
ledger card/total sales orders/invoices with tax certificates/computations
COMPUTES
balances/extensions on sales recap/averages/percentages
RECORDS
amount owed on collection sheet/amounts and quantities shipped/actual expenditures by department
TYPES
letter requesting tax certificate/tax forms/summary sheet/sales orders/recap sheets/comparison recap sheet/budget report on offset mats
Proofreads
typewritten materials
Totals
all balances/percentages
DUPLICATES
daily, weekly sales report

DISPOSITION

FILES
copy of invoice amounts/transmittal sheet/recap sheet/report
DELIVERS
recap sheet to Data Processing/copy of collection sheets to supervisor/original sales orders/sales report/recap sheet to Payroll
Distributes
sales report copies/recap sheets
MAILS
collection sheets to salesmen/cover letter with tax forms/sales reports

SUPPLEMENTARY STEP: Microfilms copy of sales slips

REPORTED CRITERIA: "Accurate picture of current status of sales compared to previous year; Use judgment deciding whether an item is income or reduction in expense; Tax commissioner receives report on time; All totals balance"

HARDWARE

Adding machine (10-key)
Typewriter
Calculator
Duplicator
Files

SOFTWARE

Sales orders, slips
Collection sheets
Tax certificates
Sales reports
Budget reports
Recap sheets
Invoices

EDUCATIONAL CUES

Accuracy
Checking
Making numerical comparisons
Computational skills
Filing
Typing

ACCOUNTS RECEIVABLE CRITICAL INCIDENTS

"Worker makes an occasional error of sending the incorrect number of copies of bills to those customers who are billed in an irregular way. The customer does not receive enough copies of the bill or receives too many."

"Initially the worker did not use decimals well. Consequently, the worker recorded an invoice incorrectly which cost the company a considerable amount of money."

"The office changed billing machines, and one girl was chosen to learn the machine first. It took less than an hour for her to learn it instead of the full day the trainer expected."

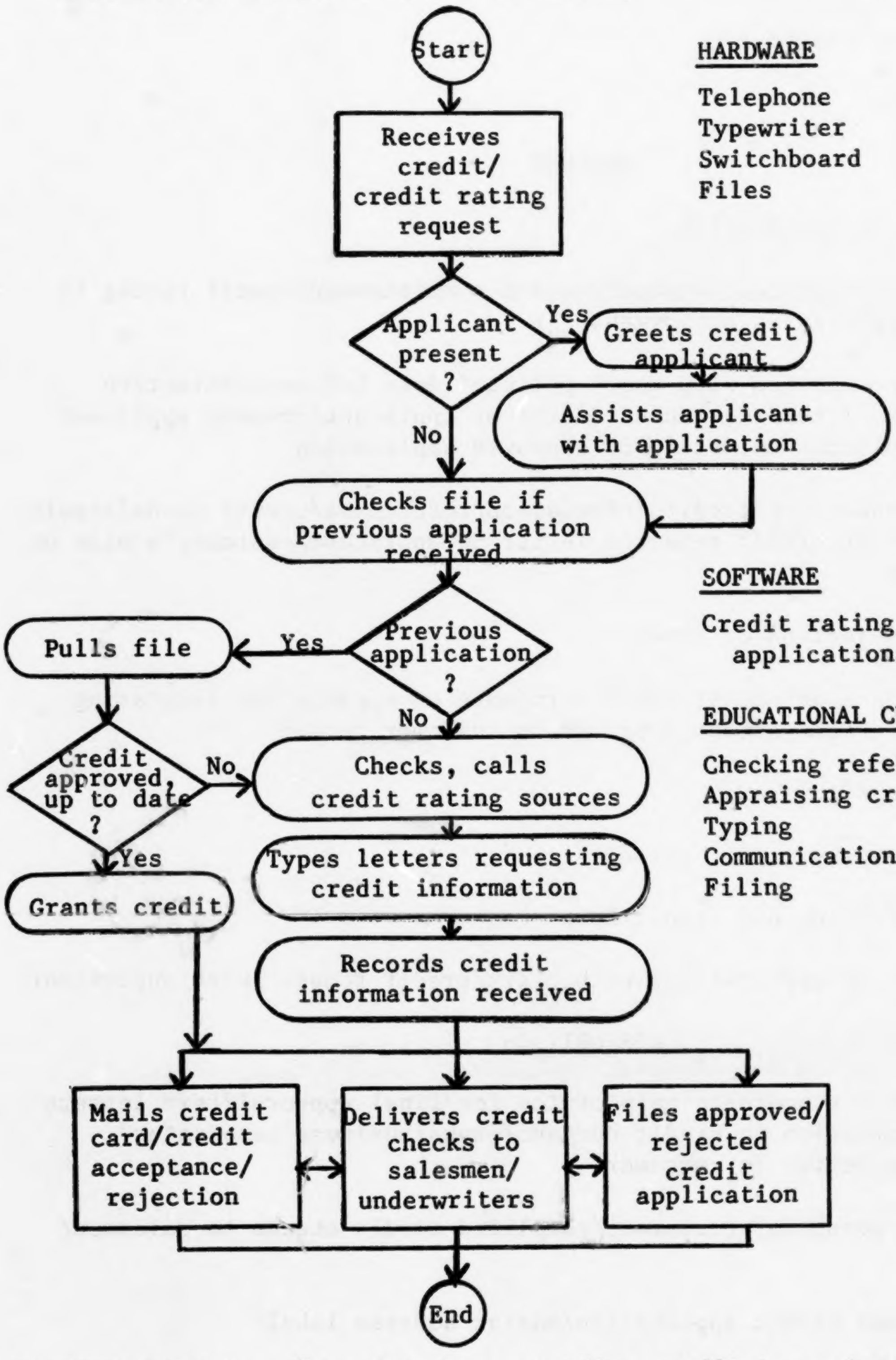
"Once a customer sent in a check that was payable to the local telephone company along with his check to us. The employee did not check the name of the company the check was made out to and went ahead and posted the check with the customer's account number with us. We went ahead and tried to deposit the check in our account with the rest of the checks. The employee did not anticipate the fact that a customer might make a mistake and send us a wrong check. Now she checks the payee name on all checks before we send them to the bank."

"Yesterday we received a call from an irate salesman who had talked to an irate customer. Customer owed $25,000 and had not paid for a year. He had been misbilled consistently on a pricing plan and demanded a personal visit with copies of all invoices so he could pay and clear the debt. The worker put together the entire file, reconstructed events, and discovered that five credits had been issued in error. To offset these credits, debits had then been issued; and the customer interpreted the debits as new billings. She wrote a letter to the customer explaining the situation. The bill was paid."

"Before loading can be started by the Shipping Department, the worker must compute cubic weight, measurements, and carton count on the invoice and bill of lading. After the worker had been there for only a few months, a large order was received with a "rush" sticker. The worker realized it would take a long time to figure the necessary calculations so suggested making a photocopy of the invoice to be sent to the Shipping Department to enable them to start assembling the cartons. This procedure was so effective for both the packers and the worker, this photocopy of rush orders has been made policy."

1.7 ACCOUNTING, CREDIT RATING AND INFORMATION

1. GIVEN APPLICANTS FOR CREDIT AND CREDIT REQUESTS, THE WORKER CHECKS AND CALLS CREDIT RATING SOURCES AND RECORDS POSITIVE AND NEGATIVE CREDIT INFORMATION RECEIVED. (17 task sheets)


Start
Receives credit/ credit rating request
Applicant present ?
Yes
Greets credit applicant
Assists applicant with application
No
Checks file if previous application received
Previous application ?
Yes
Pulls file
No
Credit approved, up to date ?
No
Checks, calls credit rating sources
Yes
Grants credit
Types letters requesting credit information
Records credit information received
Mails credit card/credit acceptance/ rejection
Delivers credit checks to salesmen/ underwriters
Files approved/ rejected credit application
End

HARDWARE

Telephone
Typewriter
Switchboard
Files

SOFTWARE

Credit rating books/
applications/letters

EDUCATIONAL CUES

Checking references
Appraising credit potential
Typing
Communication skills
Filing

REPORTED CRITERIA: "Careful when extending credit to customers; Makes sure all credit information on customer is accurate; Should never fail to find a card that is on file; Complete knowledge of credit card issuing criteria required; Accuracy is of prime importance"

ACQUISITION

RECEIVES
  customer credit application/verbal request to check credit rating/approved credit application/loan application
Obtains
  name, address of customer
Greets
  credit applicant

PROCESS

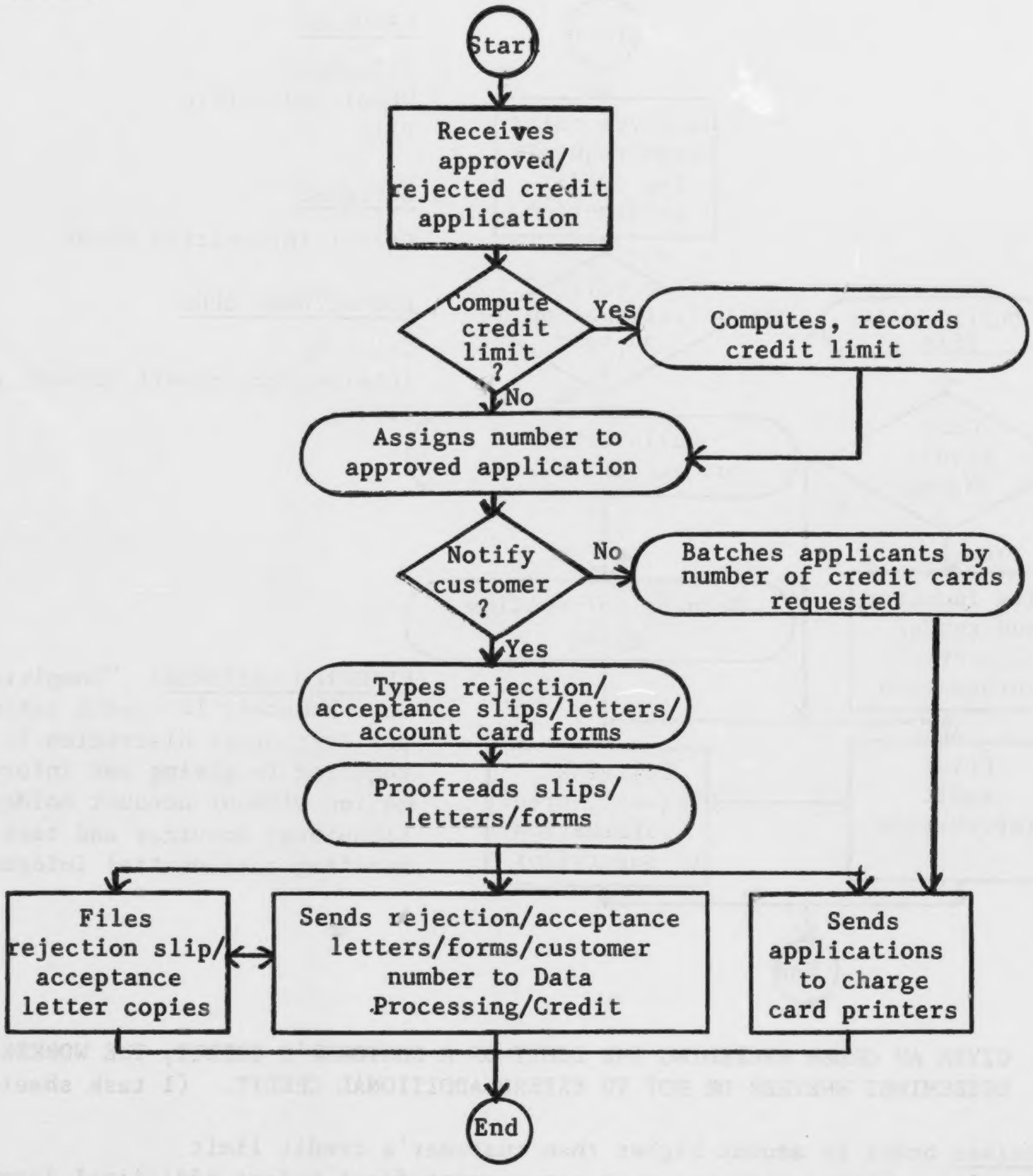
DETERMINES
  cause of error on application
CHECKS
  file for previous application/application completeness/credit rating in credit books/applicant's employment
CALLS
  credit bureaus/companies with whom applicant does business/detective agency to check client/references listed by applicant/company applicant employed by/applicant to notify of approved application
TYPES
  form letters requesting credit information/references/credit cards/credit approved letter or credit rejected letter to applicant/customer's name on file folder tab
RECORDS
  acceptance or rejection of credit
Writes
  credit rating data on credit check form/note on application indicating credit checked/credit amount approved on customer record
Obtains
  signature of credit manager
INFORMS
  applicant of company credit policies
Assists
  applicants in filling out credit form
Discusses
  errors on rejected applications with clerk/credit request with supervisor

DISPOSITION

MAILS
  credit cards to customers/to main office for final approval/form letters requesting information to credit bureaus/banks/business associates/approved credit letter to customer
DELIVERS
  application to potential customers/completed credit checks to salesmen/underwriters
FILES
  approved customer credit application/master address label

2. GIVEN A LIST OF DELINQUENT ACCOUNTS, THE WORKER COMPILES AND UPDATES THE LIST FOR THE COLLECTION AGENTS. (1 task sheet)

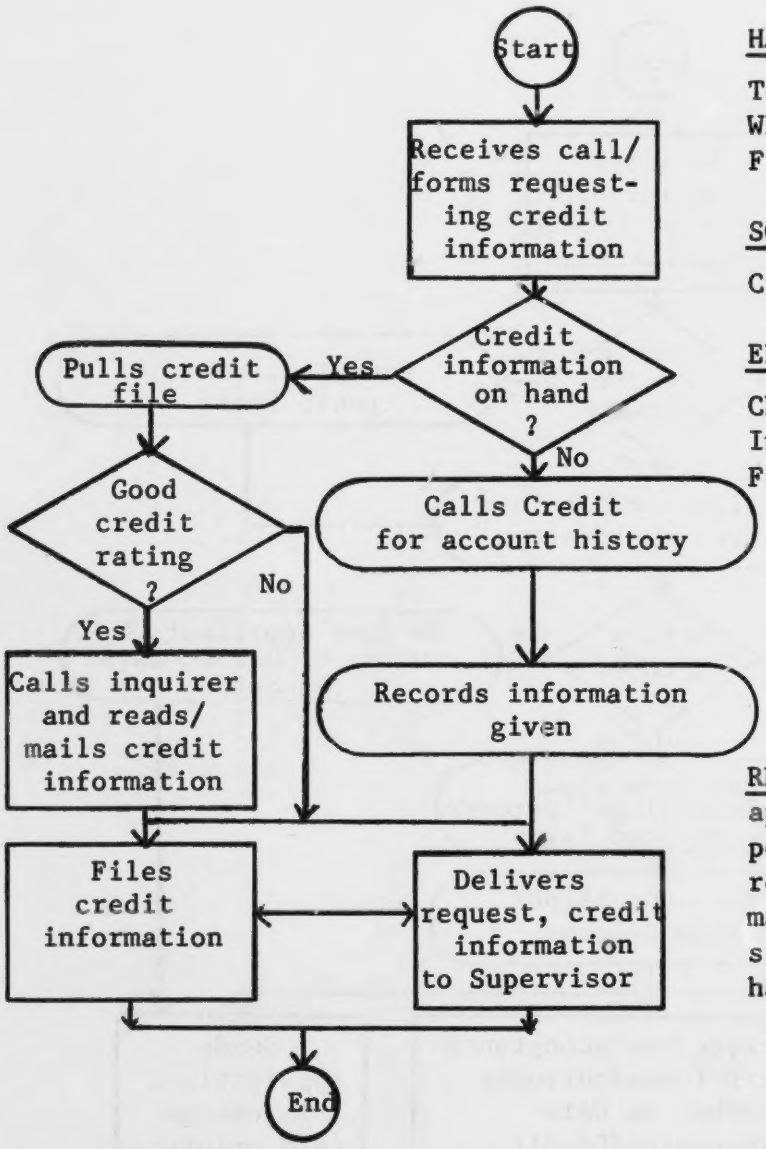
3. GIVEN PROCESSED CREDIT APPLICATIONS, THE WORKER NOTIFIES APPLICANT AND COMPANY DEPARTMENTS OF APPROVED/REJECTED CREDIT APPLICATIONS. (7 task sheets)


Start
Receives approved/ rejected credit application
Compute credit limit ?
Yes
Computes, records credit limit
No
Assigns number to approved application
Notify customer ?
No
Batches applicants by number of credit cards requested
Yes
Types rejection/ acceptance slips/letters/ account card forms
Proofreads slips/ letters/forms
Files rejection slip/ acceptance letter copies
Sends rejection/acceptance letters/forms/customer number to Data Processing/Credit
Sends applications to charge card printers
End

HARDWARE	**SOFTWARE**	**EDUCATIONAL CUES**
Adding machine (10-key)	Credit rejection/ approved letters	Typing
Typewriter	Credit card forms	Computational skills
Files		Recording
		Filing

REPORTED CRITERIA: "Notifications must be handled on daily basis; Letters sent contain no errors"

4. GIVEN A REQUEST FOR CREDIT INFORMATION ON A CUSTOMER, THE WORKER PROCESSES THE REQUEST. (3 task sheets)


Start
Receives call/ forms requesting credit information
Credit information on hand ?
Yes
No
Pulls credit file
Good credit rating ?
Yes
No
Calls Credit for account history
Records information given
Calls inquirer and reads/ mails credit information
Files credit information
Delivers request, credit information to Supervisor
End

HARDWARE

Telephone
Wheel index file
File

SOFTWARE

Credit information forms

EDUCATIONAL CUES

Checking
Interpreting credit account data
Filing

REPORTED CRITERIA: "Completes approximately 10 credit ratings per day; Great discretion is required in giving out information without account holder's signature; Accuracy and tact in handling confidential information"

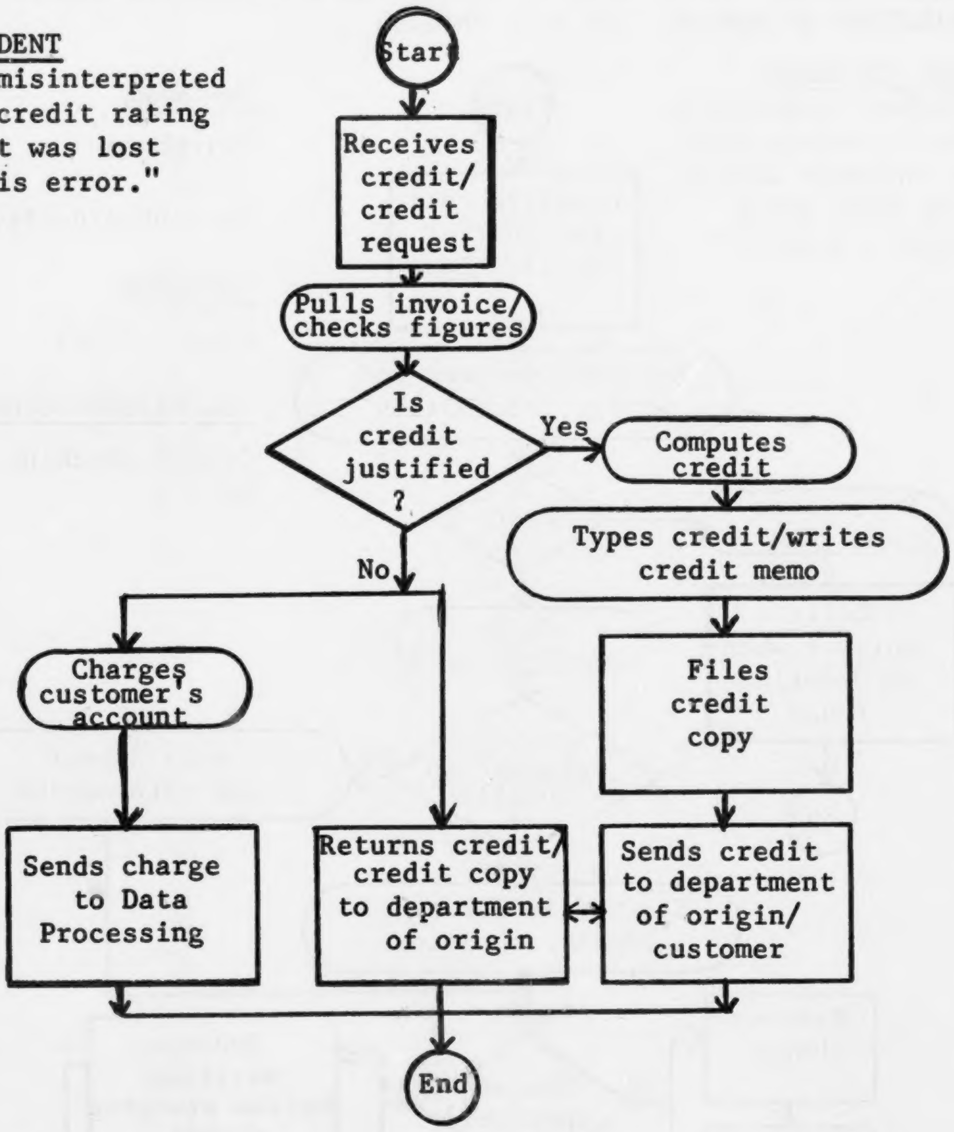
5. GIVEN AN ORDER EXCEEDING THE LIMIT OF A CUSTOMER'S CREDIT, THE WORKER DETERMINES WHETHER OR NOT TO EXTEND ADDITIONAL CREDIT. (1 task sheet)

Receives order in amount higher than customer's credit limit
Determines whether customer must pay account first before additional larger credit is given
Checks past payment history, current credit book rating
Writes for confidential information from suppliers who extend this customer credit
Determines from information gathered if requested credit will be extended
Notifies branch office to release, hold, or return order
Sends letter to customer extending or refusing credit

6. GIVEN CREDITS OR CREDIT REQUESTS, THE WORKER ACCEPTS OR REFUSES CREDIT TO CUSTOMER'S ACCOUNT. (5 task sheets)

CRITICAL INCIDENT

"The employee misinterpreted a customer's credit rating and an account was lost because of this error."


Start
Receives credit/ credit request
Pulls invoice/ checks figures
Is credit justified ?
Yes
No
Computes credit
Types credit/writes credit memo
Files credit copy
Charges customer's account
Sends charge to Data Processing
Returns credit/ credit copy to department of origin
Sends credit to department of origin/ customer
End

SUPPLEMENTARY STEP: Adjusts old credit memos against old invoices

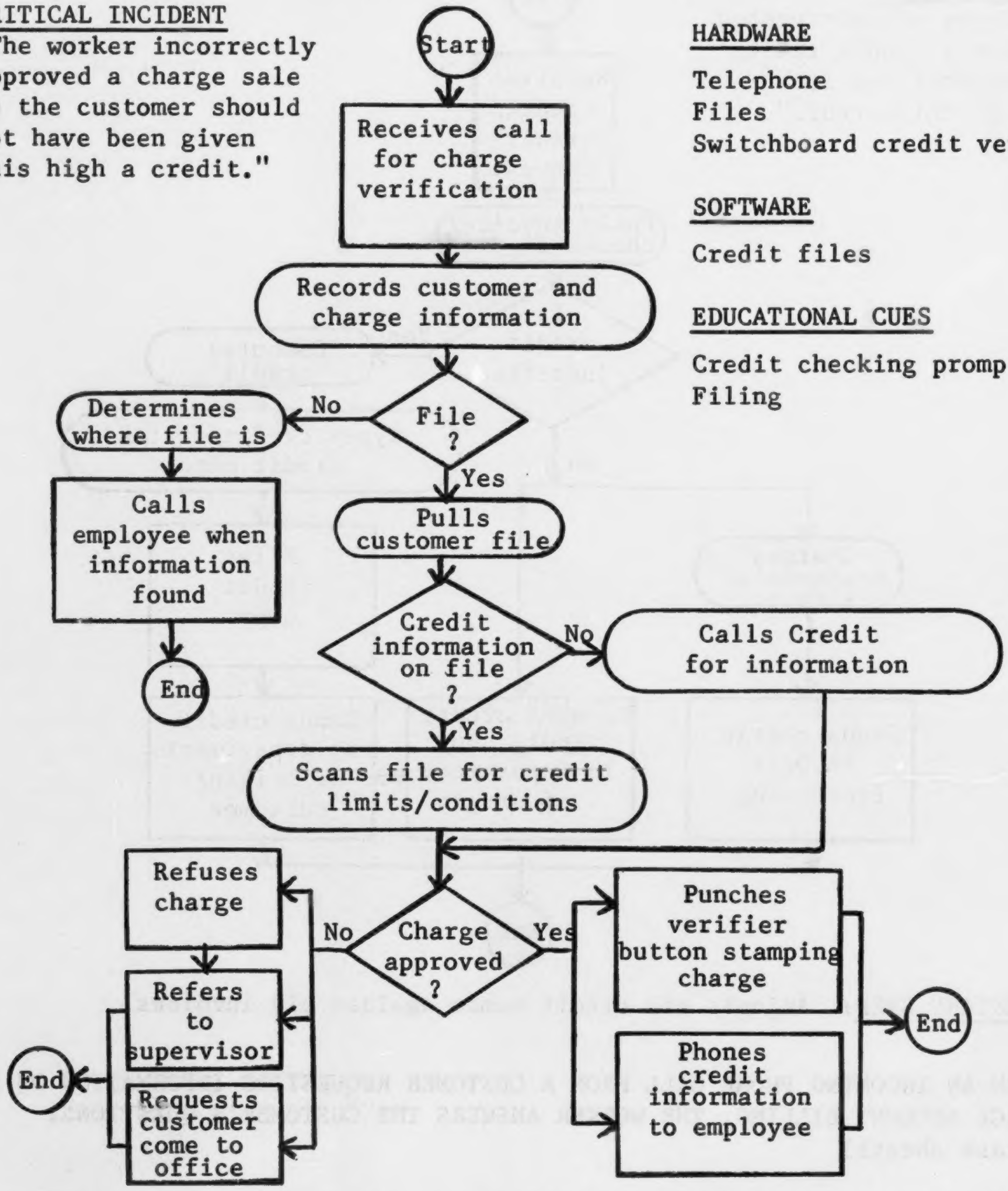
7. GIVEN AN INCOMING PHONE CALL FROM A CUSTOMER REQUESTING INFORMATION ON HIS CHARGE ACCOUNT BILLING, THE WORKER ANSWERS THE CUSTOMER'S QUESTIONS. (2 task sheets)

Receives charge billing call
Informs customer of breakdown on outstanding balance
Calls or writes branch if customer has additional questions
Calls customer when account question/error is solved
Records disposition of call

8. GIVEN A COMPUTER PRINTOUT SHEET ON NEWSBOYS, AMOUNT OF PAPER SOLD, AND CASH RECEIPTS TURNED IN, THE WORKER COMPILES DELINQUENT RECEIPTS REPORT. (1 task sheet)

9. GIVEN A CALL REQUESTING CREDIT VERIFICATION ON A CUSTOMER'S PURCHASE, THE WORKER CHECKS CREDIT LIMITS, CONDITIONS AND NOTIFIES CALLER OF ACCEPTANCE/ REJECTION OF CREDIT. (8 task sheets)

CRITICAL INCIDENT
"The worker incorrectly approved a charge sale as the customer should not have been given this high a credit."


Start
Receives call for charge verification
Records customer and charge information
File ?
No
Yes
Determines where file is
Calls employee when information found
End
Pulls customer file
Credit information on file ?
No
Calls Credit for information
Yes
Scans file for credit limits/conditions
Charge approved ?
No
Yes
Refuses charge
Refers to supervisor
Requests customer come to office
End
Punches verifier button stamping charge
Phones credit information to employee
End

HARDWARE
Telephone
Files
Switchboard credit verifier

SOFTWARE
Credit files

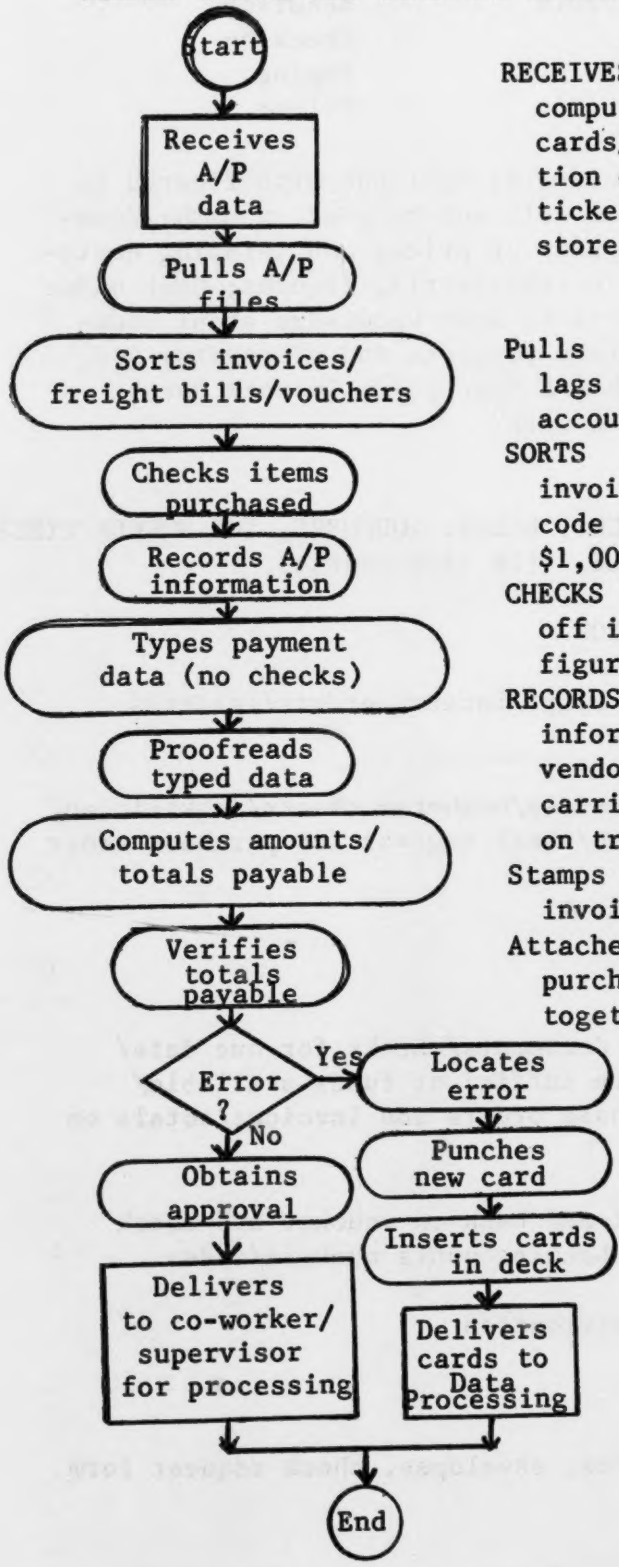
EDUCATIONAL CUES
Credit checking promptness
Filing

REPORTED CRITERIA: "Accuracy in transmitting information; Accuracy is important to prevent a customer from overcharging; Swift in locating desired customer account card in file so as not to keep customer and sales person waiting at counter"

10. GIVEN A WIRE REQUESTING COMPANY TO ISSUE A CHECK TO CUSTOMER ON AMOUNT CREDITED TO CUSTOMER'S ACCOUNT, THE WORKER CHECKS IF CUSTOMER HAS CREDIT FOR THAT AMOUNT AND WIRES BRANCH TO PAY OR NOT TO PAY CUSTOMER. (1 task sheet)

1.8 ACCOUNTING, ACCOUNTS PAYABLE (PURCHASING ACCOUNTING)

1. GIVEN SOURCE DOCUMENTS SUCH AS PUNCHED CARDS, STATEMENTS, INVOICES, THE WORKER CHECKS AND COMPUTES ACCOUNTS PAYABLE. (52 task sheets)


Start
Receives A/P data
Pulls A/P files
Sorts invoices/ freight bills/vouchers
Checks items purchased
Records A/P information
Types payment data (no checks)
Proofreads typed data
Computes amounts/ totals payable
Verifies totals payable
Error ?
Yes
No
Locates error
Punches new card
Inserts cards in deck
Obtains approval
Delivers to co-worker/ supervisor for processing
Delivers cards to Data Processing
End

ACQUISITION

RECEIVES
computer listing of accounts payable/punched cards/purchase order copies/invoices/requisition cards/statements/purchase tickets/ tickets on accounts payable from branch stores/computer time use report

PROCESS

Pulls
lags in machine operating time/invoices/ accounts payable ledger sheets

SORTS
invoices/freight bills (alphabetically, by code number)/vouchers (over $1,000, under $1,000)

CHECKS
off items that correspond/prices/retail figures/costs/invoice amounts/errors

RECORDS
information on make up sheets/date received, vendor number/discounts on invoices/delivery carrier on invoice/date due, terms/information on transmittal sheet

Stamps
invoice with date/"OK" on invoices

Attaches
purchase order, receiving slip, invoice together/blank check to each bill/invoice to purchase order/list and check request

TYPES
authorization slip to pay/check request/schedule of payments/credit memo/purchase orders

Proofreads
typed data

COMPUTES
discounts/extensions/net amount due

Verifies
totals payable

Punches
new card when error is found

Obtains
approval/signature on invoices/ initials

DISPOSITION

DELIVERS
punched cards/vouchers/to Data Processing/accounts payable data to co-worker/supervisor

SUPPLEMENTARY STEP: Photocopies transmittal sheet and bill

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Catalog	Computational skills
Adding machine (10-key)	Accounts payable documents	Accuracy
Calculator	Code book	Checking
Hand stamp		Typing
		Filing

REPORTED CRITERIA: "Must be exact and accurate; Aptitude with figures is essential; Must have the ability to reason well and be good in math; Knowledgable in filing procedures; Correct typing of prices and shipping destination; Good handwriting; High accuracy in transferring figures; Work under pressure; Decimal placement is very important; Some knowledge about bookkeeping; Check numbers carefully; Understand percents and discounts; Add, subtract, multiply, and divide easily; Should take pride in work done; Ability to withstand monotonous repetitive work"

2. GIVEN SOURCE DOCUMENTS SUCH AS INVOICES, BILLS, VOUCHERS, THE WORKER TYPES ORDERS AND CHECKS FOR ACCOUNTS PAYABLE. (16 task sheets)

ACQUISITION

RECEIVES
  invoices/freight bills/vouchers/refund slips/factory orders/letters/ delivery receipts
Obtains
  sheet of account numbers/statements/invoices/numbered checks/requisition/ vendor activity ledger/stock record book/check request for purchase order

PROCESS

SORTS
  purchase orders
CHECKS
  information on accounts payable source documents/checks for due date/ appropriation ledger to see if there are sufficient funds available/ vendor number/items and prices on purchase orders and invoices/totals on all checks
RECORDS
  essential information concerning amount and bank on voucher and check register sheet/amount to be billed on check/accounts numbers/codes
Stamps
  check number on voucher/voucher for distribution
Writes
  "Void" on check
TYPES
  checks, check stubs, disbursement reports, envelopes, check request form
Totals
  all checks written/check requests
Attaches
  copy of check to statement/original order and file copy/check request form to letter

DISPOSITION

MAILS
  checks
DELIVERS
  accounts payable data to bookkeeper/accounting manager/travel clerk/comptroller
FILES
  carbon copies of checks/purchase orders/purchasing data

SUPPLEMENTARY STEP: Photocopies distribution report

HARDWARE	**SOFTWARE**	**EDUCATIONAL CUES**
Typewriter	Checks	Accuracy
Check proof machine	Accounts payable documents	Statistical typing
Stamp	Check stubs	Coding
		Proofreading
		Checking

REPORTED CRITERIA: "Accurate payment of bills; Checks typed with no errors; Accurate reading ability is essential; Knowledge of codes for each bank with which the company has accounts; Extreme care in checking details"

3. GIVEN SOURCE DOCUMENTS SUCH AS INVOICES, PURCHASE ORDERS, BILLS, THE WORKER RECORDS AND POSTS ACCOUNTS PAYABLE. (30 task sheets)

ACQUISITION

RECEIVES
  packing slips/copies of all checks typed, signed/requisitions, bills/invoices/purchase orders/punched cards from Data Processing

PROCESS

Pulls
  creditors accounts payable ledger, invoices
CHECKS
  all payment totals/receiving report, purchase order
TYPES
  letter/envelopes
RECORDS
  totals on summary sheet/invoice dates/invoice numbers, dates, amounts, price changes, costs on card system/rental of equipment
Posts
  amounts on ledger sheet with bookkeeping machine
Stamps
  requisitions, bills with date
Codes
  requisitions, bills
Punches
  amounts on checks/on requisitions, bills using perforating machine

COMPUTES
  all payment totals/discounts/extensions
Attaches
  invoice to purchase order/packing slip to invoice

DISPOSITION

FILES
  copies of requisitions, bills, invoices, ledger sheets alphabetically
DELIVERS
  invoices to shipping clerk
Sends
  invoices copy to recipient
Distributes
  materials to designated persons

SUPPLEMENTARY STEP: Obtains supervisor's signature on checked invoices received

HARDWARE

Perforating machine
Adding machine (10-key)
Bookkeeping machine
Typewriter
Hand stamp
Calculator
Files

SOFTWARE

Code book
Envelopes
Requisitions, bills
Price lists
Cards
Invoices

EDUCATIONAL CUES

Accuracy
Coding
Computational skills
Checking
Filing
Typing

REPORTED CRITERIA: "Balances daily; Some bookkeeping knowledge; Corrects all errors; Completes work same day as receives; Uses care in matching and filing; Technical vocabulary; Efficiency and promptness; Keeps work up to date"

ACCOUNTS PAYABLE CRITICAL INCIDENTS

"The job that the employee filled had been vacant for over a month. She was able to check a pile of invoices against the accounts payable ledger quickly and accurately. A bottleneck was alleviated and work began to flow once again."

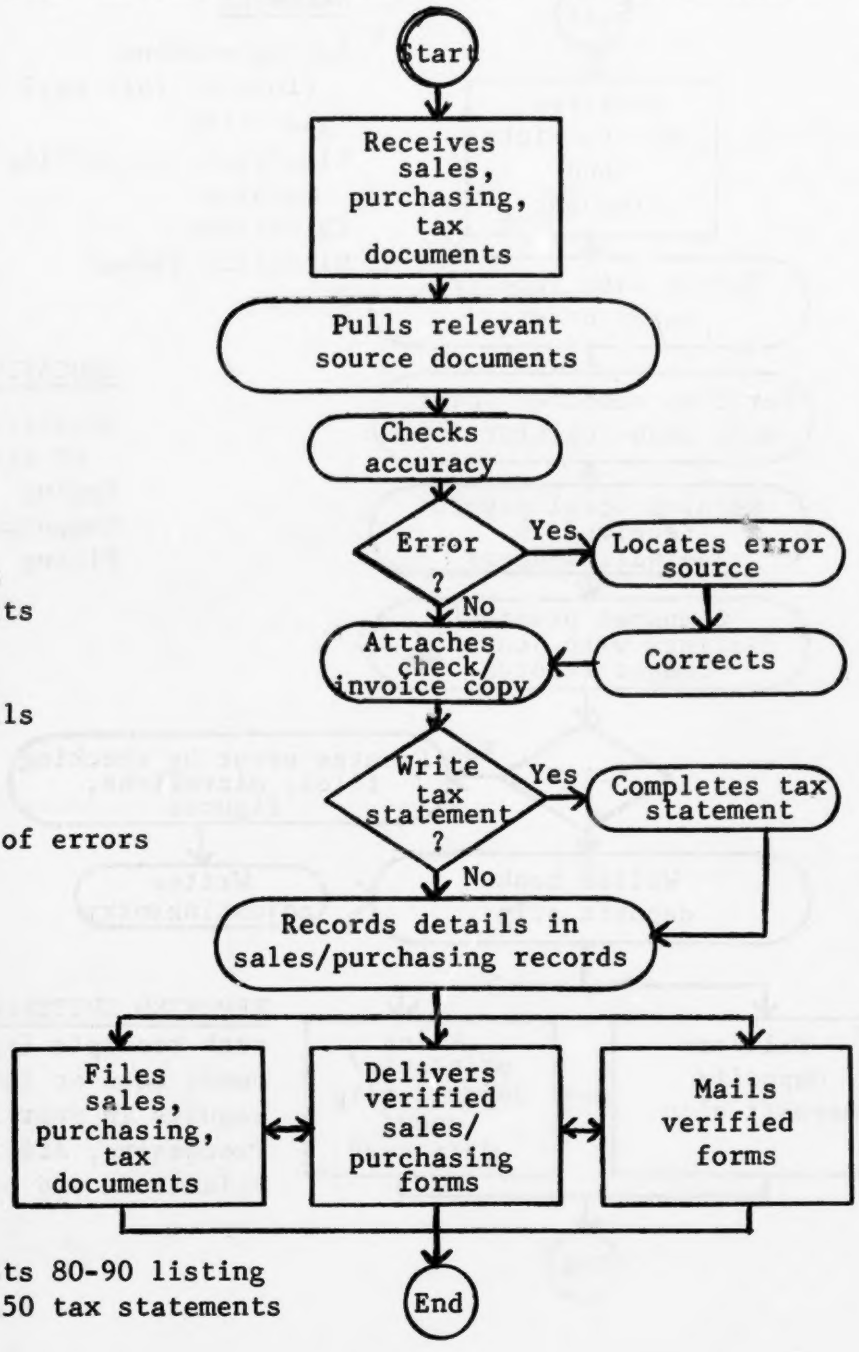
"In the job of Accounts Payable Clerk she requires close supervision. Recently it was discovered that she had put some problem files in the bottom of her work tub. Some of these dated back a year so they were among the first ones she received when she started the job. She apparently did not know what to do with the particular discrepancy and she did not want anyone to know that she did not understand the work."

"The worker misplaced a payment voucher. Upon inquiry from the vendor as to whether or not the company had paid, the error was brought out. This caused the company to lose a discount."

"Last month the employee noticed an accounts payable check which had not yet been mailed, her prompt attention to this matter saved the company eight hundred dollars."

1.9 ACCOUNTING, AUDITING AND CHECKING

1. GIVEN SOURCE DOCUMENTS SUCH AS SALES, PURCHASING, AND TAX REPORTS AND FORMS, THE WORKER CHECKS THE ACCURACY OF THE FORMS. (24 task sheets)


Start
Receives sales, purchasing, tax documents
Pulls relevant source documents
Checks accuracy
Error ?
Yes
Locates error source
Corrects
No
Attaches check/ invoice copy
Write tax statement ?
Yes
Completes tax statement
No
Records details in sales/purchasing records
Files sales, purchasing, tax documents
Delivers verified sales/ purchasing forms
Mails verified forms
End

HARDWARE

Calculator
Adding machine (10-key)
Listing adding machine
Files

SOFTWARE

Statistical tables
Tax statements
Sales tickets
Daily sales reports
Hotel guest folios
Computer printouts
Invoices, vouchers
Ledger cards, job orders
Bills of lading, manifests
Checks, credit memos
Telephone bills
Log of long distance calls

EDUCATIONAL CUES

Location and correction of errors
Computational skills
Filing

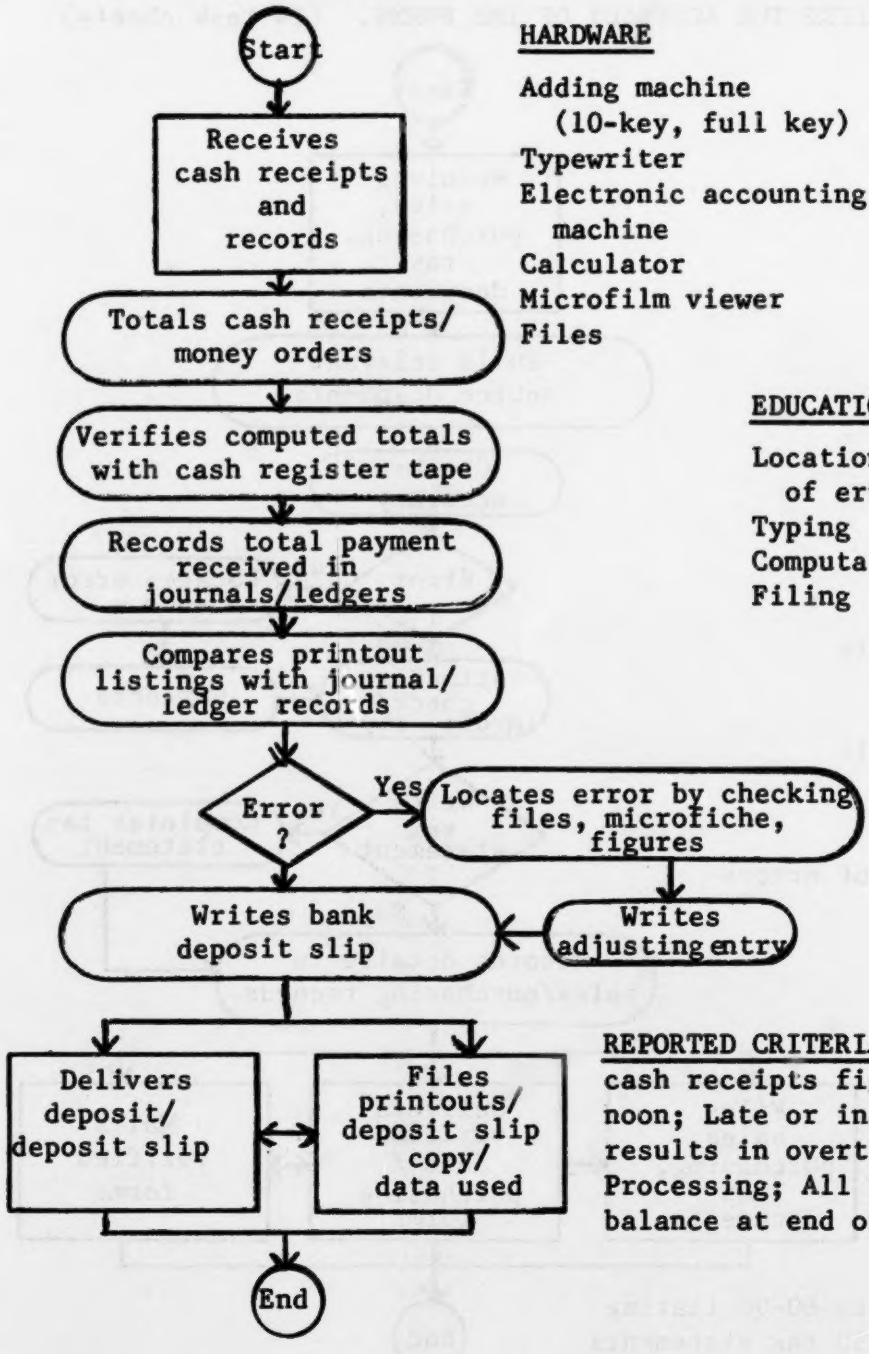
REPORTED CRITERIA: "Posts 80-90 listing pages per day; Handles 150 tax statements per month"

CRITICAL INCIDENTS

"Last week while verifying the checks written to vendors, she found a mistake on a check written for $3,000 instead of $30 (the correct amount). She issued a new check, and sent the necessary papers to Data Processing with instructions.

"A memo didn't contain the name of the department and both the employee and supervisor were unable to read the source. The employee could have checked with each merchandiser but this would have been a waste of their time. Instead, the employee went to the central file and checked through each merchandiser's book until she found the necessary information."

2. GIVEN CASH RECEIPTS AND RECEIVABLES RECORDS, THE WORKER VERIFIES AMOUNTS RECEIVED AND BANKS CASH RECEIPTS. (18 task sheets)


Start
Receives cash receipts and records
Totals cash receipts/ money orders
Verifies computed totals with cash register tape
Records total payment received in journals/ledgers
Compares printout listings with journal/ ledger records
Error ?
Yes
Locates error by checking files, microfiche, figures
Writes bank deposit slip
Writes adjusting entry
Delivers deposit/ deposit slip
Files printouts/ deposit slip copy/ data used
End

HARDWARE

Adding machine
 (10-key, full key)
Typewriter
Electronic accounting
 machine
Calculator
Microfilm viewer
Files

SOFTWARE

Journals, ledgers
Computer printouts
Control, contract
 sheets
Trial balances
Cash receipts
Money orders, vouchers
Bank deposit slip

EDUCATIONAL CUES

Location and correction
 of errors
Typing
Computational skills
Filing

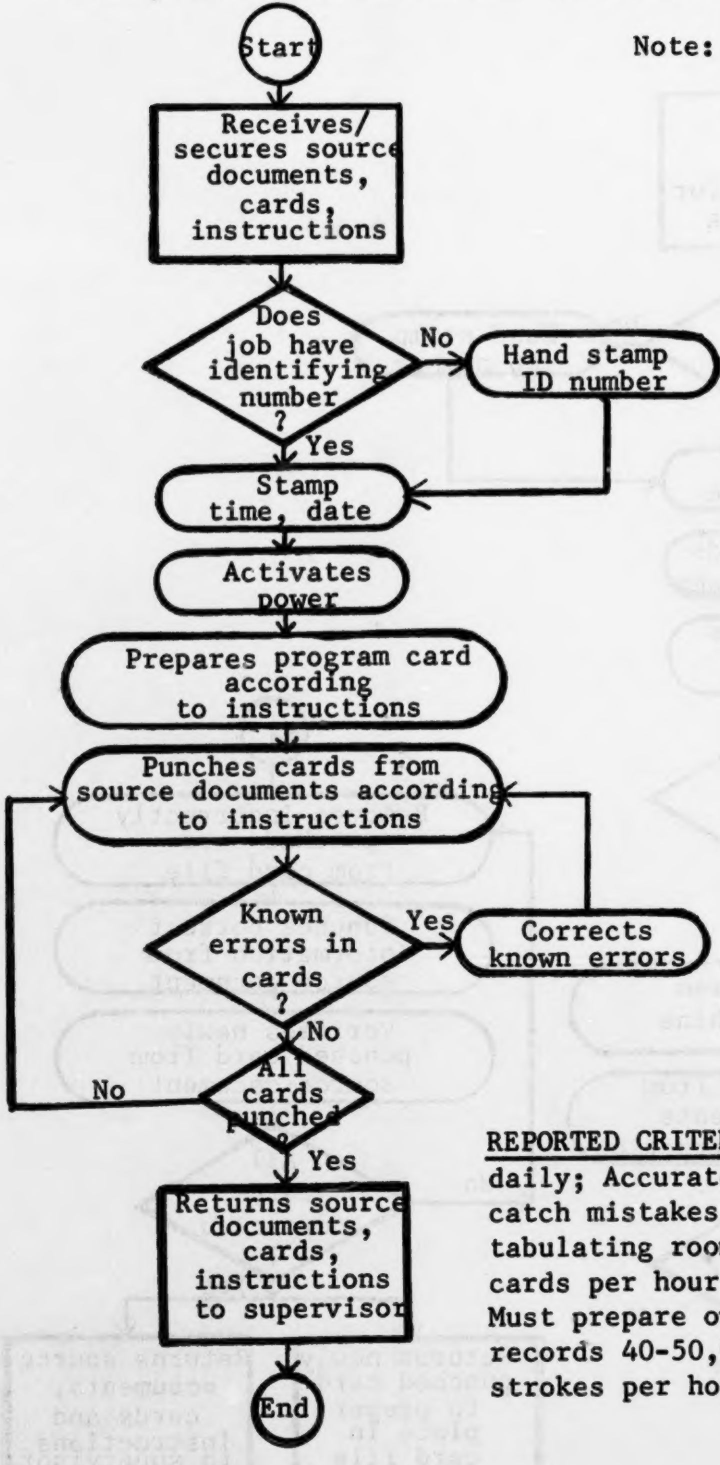
REPORTED CRITERIA: "Correctly adjusted cash receipts figures required daily by noon; Late or inaccurate performance results in overtime pay for Data Processing; All items must check and balance at end of day"

AUDITING AND CHECKING CRITICAL INCIDENT

"Last fall, a check had the wrong vendor number on it and was sent to the wrong person. That person cashed it and placed it in a savings account. We are still trying to get the money back. She did not match the name of the check with the name of the vendor."

2.1 ELECTRONIC DATA PROCESSING, KEYPUNCHING, VERIFYING

1. GIVEN SOURCE DOCUMENTS SUCH AS INVOICES, ORDERS, TIME CARDS AND INSTRUCTIONS, THE WORKER KEYPUNCHES (PUNCHES) CARDS. (96 task sheets)


Start
Receives/ secures source documents, cards, instructions
Does job have identifying number ?
No
Hand stamp ID number
Yes
Stamp time, date
Activates power
Prepares program card according to instructions
Punches cards from source documents according to instructions
Known errors in cards ?
Yes
Corrects known errors
No
All cards punched ?
No
Yes
Returns source documents, cards, instructions to supervisor
End

Note: Hardware, Software, Educational Cues listed below refers to any/all Performance Goals in this area.

HARDWARE

Keypunch (printing, other)
Files
Keytape machine

SOFTWARE

Coding sheets
Company source documents (payroll, accounting, purchasing, production, shipping, receiving, etc.)
Punch cards
Punch tape

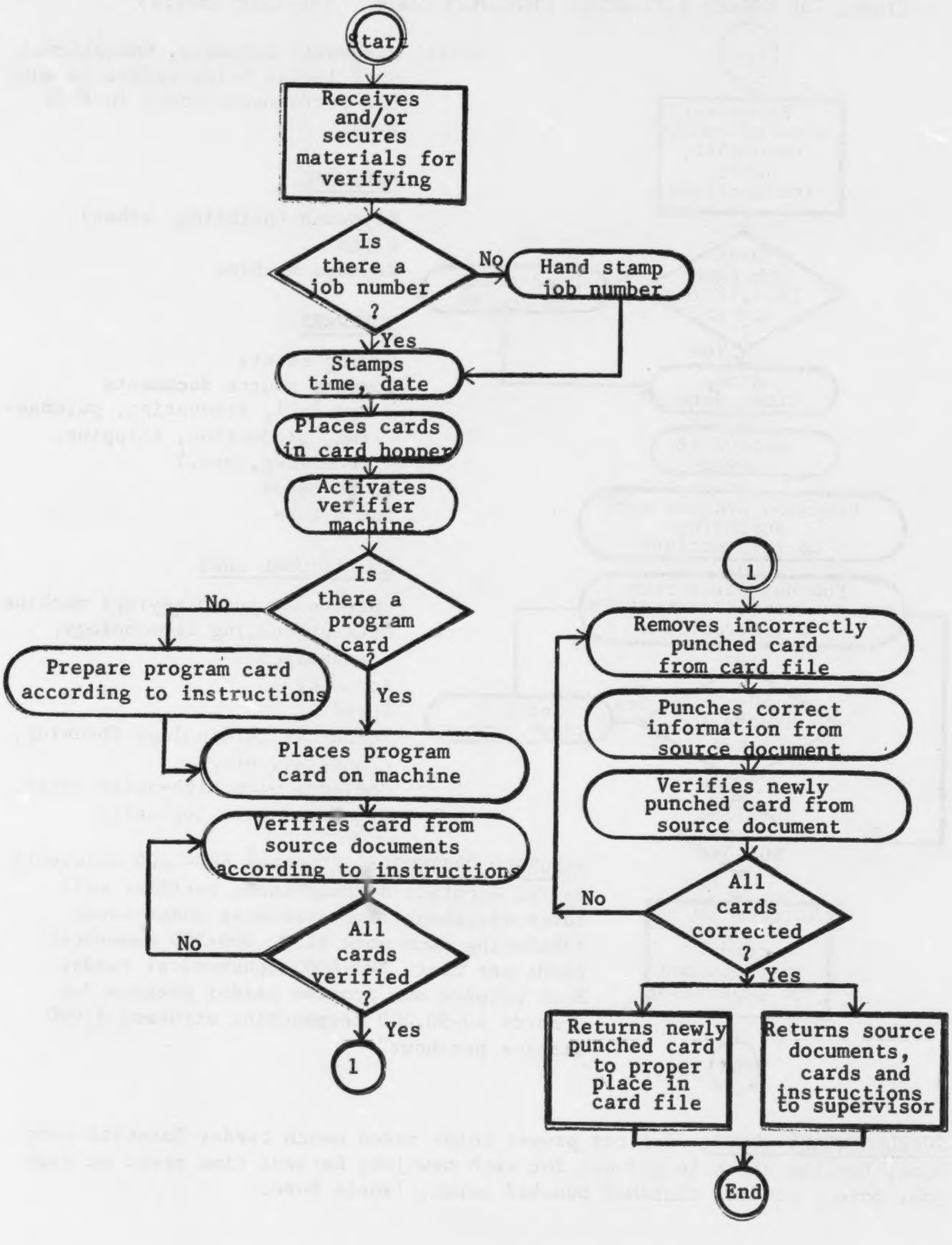
EDUCATIONAL CUES

Operate keypunch/keytape machine
Data processing terminology, languages
Accuracy
Speed
Technical terminology (banking, medical, etc.)
Contends with high-noise level
Organizes work logically

REPORTED CRITERIA: "Punches 800-1,000 documents daily; Accurate because knows verifier will catch mistakes; Time pressure; Understands tabulating room work flow; 400-500 numerical cards per hour, 300-400 alphabetical cards; Must prepare own program cards; Average day records 40-50,000 keypunching strokes; 1,000 strokes per hour"

SUPPLEMENTARY STEPS: Selects proper color coded punch cards; Consults code book; Punches clock in and out for each new job; Records time spent on each job; Boxes, bundles finished punched cards, labels boxes

2. GIVEN KEYPUNCHED CARDS AND SOURCE DOCUMENTS, THE WORKER OPERATES A VERIFIER TO CHECK THE KEYPUNCH OPERATOR. (20 task sheets)


Start
Receives and/or secures materials for verifying
Is there a job number ?
No
Hand stamp job number
Yes
Stamps time, date
Places cards in card hopper
Activates verifier machine
Is there a program card ?
No
Prepare program card according to instructions
Yes
Places program card on machine
Verifies card from source documents according to instructions
All cards verified ?
No
Yes
1
1
Removes incorrectly punched card from card file
Punches correct information from source document
Verifies newly punched card from source document
All cards corrected ?
No
Yes
Returns newly punched card to proper place in card file
Returns source documents, cards and instructions to supervisor
End

3. GIVEN SCHOOL REPORTS, THE WORKER CODES REASON FOR SCHOOL WITHDRAWAL AND PUNCHES CARD INDICATING WITHDRAWAL. (1 task sheet)

4. GIVEN WORK SELECTED AT RANDOM, THE WORKER PERFORMS QUALITY CONTROL CHECKS ON THE OPTICAL-FONT PRINTING ADDING MACHINE OPERATOR'S TAPE PRODUCTION. (2 task sheets)

5. GIVEN UP-TO-DATE KEYPUNCHING JOBS, THE WORKER OPERATES OPTICAL SCANNER BI-WEEKLY FOR PAYROLL PRINTOUT. (2 task sheets)

6. GIVEN CARDS PUNCHED EARLIER WITH VERIFIER DISCOVERED ERRORS, THE WORKER DUPLICATES CARD TO VERIFIER NOTCH, REFERS TO SOURCE DOCUMENT, KEYPUNCHES CORRECTION, AND RETURNS TO VERIFIER. (7 task sheets)

7. GIVEN SOURCE DOCUMENTS, THE WORKER OPERATES A KEYTAPE MACHINE PUNCHING MAGNETIC TAPE. (8 task sheets)

2.2 ELECTRONIC DATA PROCESSING--SORTING, INTERPRETING, COLLATING, REPRODUCING, TABULATING

Note: Hardware, Software, Educational Cues listed below refers to any/all Performance Goals in this area.

HARDWARE

IBM 029 card punch
083, 83, 804 sorter
557 interpreter
519 reproducer
188 collator
402 accounting machine
1287 optical scanner
Flexowriter
Control boards

SOFTWARE

Punched cards
Equipment operations manual
Tape
Source documents
Magnetic disks

EDUCATIONAL CUES

Operating unit record equipment
Data processing terminology

8. GIVEN PUNCHED CARDS RELATING TO PAYROLL, DISBURSEMENT ACCOUNTING, INVENTORY, PRODUCTION, MONEY ORDERS, INVESTMENT CERTIFICATES, STUDENT CARDS, THE WORKER OPERATES UNIT RECORD EQUIPMENT INCLUDING THE SORTER, REPRODUCER, COLLATOR, INTERPRETER. (22 task sheets)

Determines first job number from daily job schedule
Receives punched cards, instructions
Records job number, time on machine usage form/personal activity form
Wires panel if necessary or
Places prewired panel in unit record equipment
Places punched cards, blank cards (if necessary) in unit record equipment
Activates machine
Places punched cards in boxes/bundles/batches according to directions
Records time in machine usage log/form/time card

SUPPLEMENTARY STEPS: Mails sorted cards to salesmen, places heading card in front of deck; Unmatched cards (collator operation) must be checked; Keypunches card for new account; Reproduces non-sortable cards

REPORTED CRITERIA: "Must keep keypunch card files separate for each job, must complete jobs quickly to free machine for other operators; Must make decisions on job priorities; Completes all work daily; Must have technical vocabulary"

9. GIVEN ACCOUNT STATEMENTS, PRODUCTION FIGURES, INVENTORY LISTINGS, PUNCHED CARDS, WIRED OR UNWIRED BOARDS, THE WORKER OPERATES AN ACCOUNTING (TABULATING) MACHINE TO GET REQUESTED TOTALS, LISTINGS, REPRODUCIBLE RECORDS. (5 task sheets)

10. GIVEN SALES SLIPS, TEST PAPERS, OTHER PRINTED DATA, THE WORKER OPERATES OPTICAL SCANNING EQUIPMENT TO CONVERT PRINTED DATA TO PUNCHED DATA FOR FURTHER PROCESSING. (4 task sheets)

11. GIVEN TAPES NOT CARRYING BALANCES FROM OPTICAL-FONT PRINTING ADDING MACHINE OPERATORS, THE WORKER LOCATES ERRORS, CORRECTS/ENTERS ADJUSTING AMOUNT ONTO COMPUTER INPUT TAPE. (1 task sheet)

2.3 ELECTRONIC DATA PROCESSING, CODING

12. GIVEN SOURCE DOCUMENTS SUCH AS PURCHASE ORDERS, INVOICES, AND APPLICATIONS, THE WORKER CODES THE FORMS IN PREPARATION FOR KEYPUNCHING. (44 task sheets)

Receives budget figures/purchase orders/loan application forms/resumes/work orders/policy cancellations/new customer accounts/invoices/bank notes/charge payments/deposits, withdrawals
Computes number that will be coded
Determines appropriate code by checking manual, listing, geographic location
Writes code number on source document/coding sheet
Sorts source documents
Photocopies coded invoice/purchase order
Delivers purchase orders to Auditing/source documents to originating department
Delivers coded material to Keypunching

SUPPLEMENTARY STEPS: Determines new code if necessary and adds to master code; Types index cards; Transfers printout data to journal accounts; Calls originating department for missing code; Stamps date, time on source documents received; Codes computer program from flowchart

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Coding pencils	Coding sheets	Checking, completeness
Typewriter	Business source documents	Coding
Adding machine (10-key)		Penmanship
Coding machine	Coding manuals/listings	Typing
		Good memory
		Specialized terminology (insurance)

REPORTED CRITERIA: "Accuracy checked as computer will reject errors; Good proofreading; Data must be sorted properly before it can be coded; Quality of work and not quantity is important; Codes 15 to 50 budget documents daily each taking 1-3 minutes"

CODING CRITICAL INCIDENTS

"Initially, the worker misread the codebook and miscoded some new loans. The loans were rejected by the computer and the error had to be corrected."

"In coding a re-insurance entry, the worker found the policy incorrectly written up, notified me, and saved us a lot of error time."

"Because an order for a large quantity of merchandise was coded incorrectly, the incorrect merchandise was retuned at company expense."

"Transposing just two numbers in a code tied us up all day yesterday."

2.4 ELECTRONIC DATA PROCESSING--COMPUTER OPERATION

Note: Hardware, Software, Educational Cues listed below refers to any/all Performance Goals in this area.

HARDWARE

IBM 1401, 1440, (360/30, 40, 50, 65-67), 2701-2702-2741
Teletype 033-035, 1050
Decollator
Keypunch IBM 029
Burster
Converter
Data speed machine
Tape punch/reader/printer
Honeywell 1400, 2200
Check sorter (IBM 803)
Burroughs 2500, 3500, 6500
Stapler
Emulater 7044
NCR 395
UNIVAC

SOFTWARE

Punched cards
Paper tape
Magnetic tape
Computer operations manuals
Machine usage log
Source documents i.e., payroll, financial, production

EDUCATIONAL CUES

Organizes work
Observes schedules
Operates hardware
Technical language

13. GIVEN INSTRUCTIONS, PUNCHED CARDS, AND A COMPUTER, THE WORKER REPRODUCES KEYPUNCH CARDS, MAKES PRINTED LISTS, AND PUNCHES A SUMMARY CARD OF EACH PART OF A JOB. (35 task sheets)

Receives keypunch cards from Keypunching/tape from library
Scans work request card describing job
Obtains punched program card deck from file in Data Processing
Reads instructions on program card deck
Places program card deck in computer with the input (keypunch cards needed for the job)/mounts tapes in computer

Checks machine for the correct print-out paper, keypunch cards, carriage tape, and signal switch, which indicates if the previous job is completed
Activates start button on card reader on computer
Checks control panel for indication that job is completed
Removes printed output paper/punched cards/labels/paper tape/magnetic tape/ output
Delivers the output (printed output paper and/or punched cards) from computer to person requesting job
Files computer program keypunch card deck numerically in computer center

SUPPLEMENTARY STEP: Checks to see what went wrong--card jams, computer unable to read a particular card--if computer halts in the middle of a job

REPORTED CRITERIA: "Must be able to follow a set procedure on a computer; Jobs must be run to satisfaction of individual bringing job to computer; Decides which jobs are to be run first; Must re-run jobs containing errors"

14. GIVEN INSTRUCTIONS FROM COMPUTER OPERATED TYPEWRITER, THE WORKER MOUNTS MAGNETIC TAPES ON A COMPUTER TAPE DRIVE. (4 task sheets)

Receives instructions from computer operated typewriter as to when a magnetic tape is required for a job being run
Obtains correct tape from tape librarian as per computer instructions
Mounts tape on one of the tape drives as instructed
Types in start-up message into typewriter console
Receives message on typewriter when the computer is finished with tape
Removes tape from tape drive
Delivers used tape to library area to be logged in
Returns to mount other tapes as directed by computer

REPORTED CRITERIA: "Must move fast and get the right tapes on at the proper time in order not to delay the computer; Must understand the technical language and terms printed by the computer"

15. GIVEN PAYROLL TAPES, THE WORKER PREPARES THE WEEKLY PAYROLL ON THE COMPUTER. (4 task sheets)

Receives tapes
Places tapes on tape drives on computer
Receives balanced punched card containing changes
Places punched cards in card reader hopper
Activates button to start records tape on payroll number
Removes cards from computer
Places cards in tray to go to payroll
Activates start button to sort the record tape in employee sequences, to update master payroll records, and to generate payroll check tape
Removes payroll check tape
Delivers payroll check tape to another computer to write checks
Removes tapes
Delivers tapes to library

16. GIVEN COMPUTER OUTPUT, THE WORKER DECOLLATES, BURSTS, AND BINDS COMPUTER OUTPUT. (6 task sheets)

Determines date report is to reach customer when report has been completed by computer
Operates machine for decollating (removing carbon paper)
Operates machine for bursting (separating pages)
Binds booklets (mechanically/manually) according to customer's order

17. GIVEN BATCHES OF CHECKS, THE WORKER SORTS CHECKS BY COMPUTER. (2 task sheets)

Obtains batches of checks, laid out on trays, separated by divider tickets indicating sub-totals of each batch, along with cash letters which indicate end of blocks
Programs computer for upcoming operation
Feeds checks into sorter by block
Binds 250 checks at time from individual pockets
Places bundles in trays as to bank of origin, using given code
Delivers trays on cart to Outgoing Batching Department as each block is completed
Requests cash letter from computer at end of day
Delivers cash letter to Outgoing Batching Department for balancing with individual banks' cash letters
Activates computer to clear

REPORTED CRITERIA: "Alert at all times; Ability to program and operate computer; Familiarity with banking terminology is required; Approximately 1,000 checks are sorted per minute"

18. GIVEN INSTRUCTIONS FOR PROCESSING PROGRAMMED DATA, THE WORKER PERFORMS THE BEFORE AND AFTER TASKS INVOLVED IN OPERATING ELECTRONIC COMPUTERS AND PERIPHERAL EQUIPMENT. (3 task sheets)

Checks schedule of customers for shift's processing
Discusses special instructions/techniques with customers/programmer when required
Receives turnover of jobs in process from first shift operator
Checks area for cleaniness
Checks all Input/Output devices for satisfactory operation
Checks programmed operating instructions for correct input to computer and peripheral equipment

19. GIVEN SOURCE DOCUMENTS AND COMPUTER OUTPUT, THE WORKER BALANCES MANUALLY PREPARED TOTALS WITH COMPUTER DETAILED TOTALS. (4 task sheets)

20. GIVEN A DATA SPEED MACHINE, PUNCHED TAPE OUTPUT AND A CONVERTER, THE WORKER WILL TROUBLE TEST TAPES TO CHECK ACCURACY OF SENDING INSTALLATION. (1 task sheet)

21. GIVEN PUNCHED CARDS FOR COMPUTER INPUT, THE WORKER PLACES CARDS IN TRAYS, WRITES COMPUTER RUN SLIP, AND DELIVERS TO COMPUTER. (2 task sheets)

22. GIVEN A SITUATION WHERE A COMPUTER MALFUNCTIONS, THE WORKER RUNS DIAGNOSTICS TO DETERMINE CAUSE OF ERROR AND DELIVERS DIAGNOSTICS TO COMPUTER ENGINEERS. (2 task sheets)

2.5 ELECTRONIC DATA PROCESSING--COMPUTER PROGRAMMING

Note: Hardware, Software, Educational Cues, and Reported Criteria listed below refers to entire area of Computer Programming.

HARDWARE

Computers: IBM 360/20, 30, 40, 50, 65-67
Remote terminal system
Unit record equipment

SOFTWARE

Computer input sheets
Computer reference manuals
Previously tested programs
Computer languages: COBOL, FORTRAN, SPS, DOS, 1401, Autocoder, 360 assembly
Coding sheets

EDUCATIONAL CUES

Flowcharting
Analyzing problems
Computer languages
Computer programming terminology
Keypunching
Logical reasoning
Unit record equipment operation

REPORTED CRITERIA: "High degree of technical skills needed especially: logic, accuracy, computer language; Task is successful when job run completes without error; Delays occur if program isn't written quickly; Skill in flowcharting; Writes about one long program a month; Algebra, geometry helpful"

23. GIVEN COMPUTER ACCEPTING PROGRAM, THE WORKER TESTS THE PROGRAM ON COMPUTER WITH ACTUAL DATA. (4 task sheets)

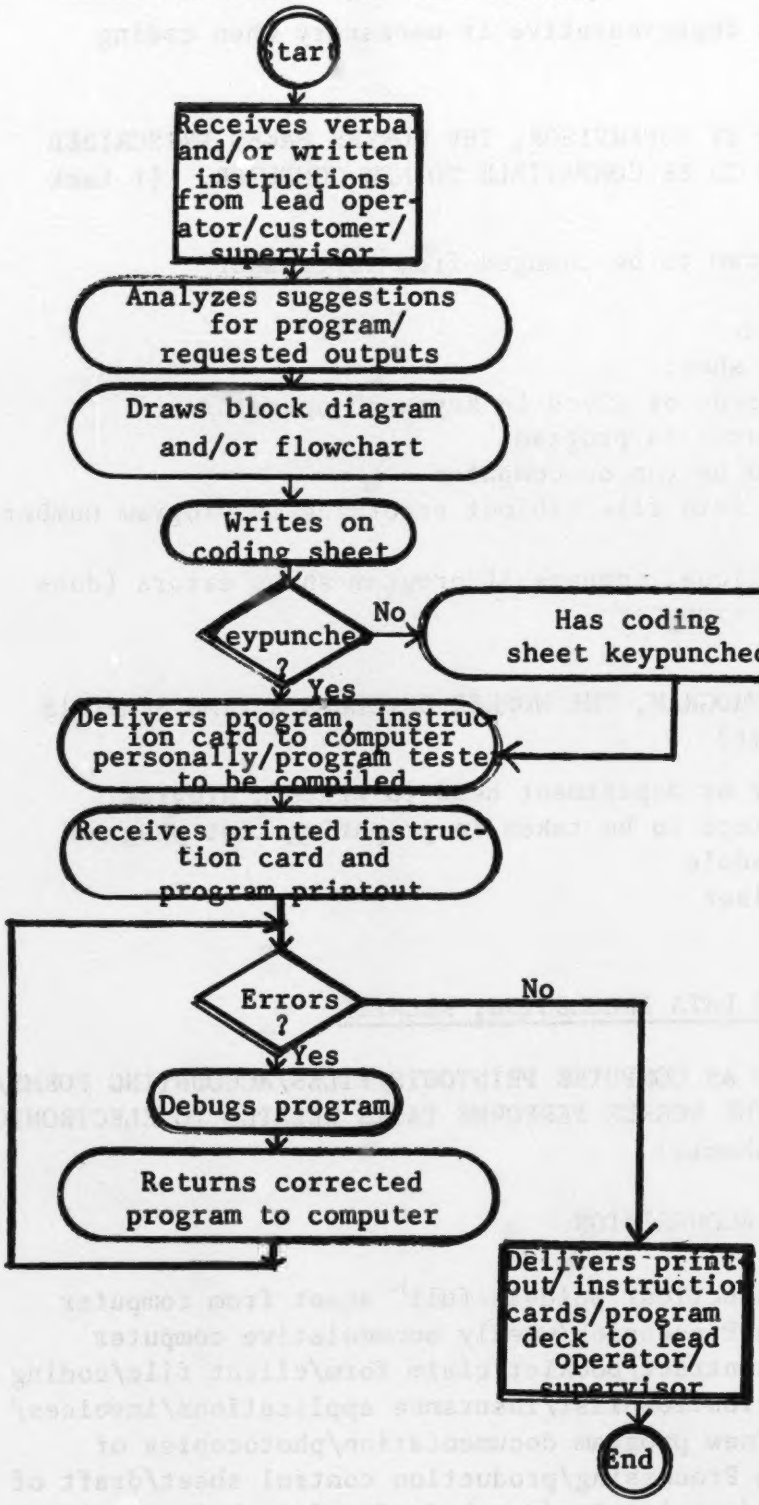
Receives program without error from Computer Operations
Obtains sample of data that will be used when program actually is in operation (If there is no sample data (obtained from department that requested program) programmer makes up data that is like actual)
Checks that data covers all possible conditions
Sends program and data to computer for test run
Tests on computer until satisfied that program works correctly
Revises and analyzes problems if any error or output not as specified

24. GIVEN THAT PROGRAM TESTS CORRECTLY, THE WORKER DOCUMENTS THE PROGRAM (PUTS INTO FINISHED FORM). (3 task sheets)

Receives program with note that it works satisfactorily
Writes up operating instructions (for Computer Operations) by filling in preprinted forms that tell when and how program to be run on computer, i.e.,

where to get input, how often to run, etc.
Writes up a paragraph or two that explains the purpose of the program, what is happening in program
Prepares a formal flowchart
Delivers to supervisor to be filed with other documentations

25. GIVEN A REQUEST TO WRITE A PROGRAM, THE WORKER ANALYZES, WRITES, AND DEBUGS PROGRAM. (18 task sheets)


Start
Receives verbal and/or written instructions from lead operator/customer/supervisor
Analyzes suggestions for program/requested outputs
Draws block diagram and/or flowchart
Writes on coding sheet
keypunched?
No
Has coding sheet keypunched
Yes
Delivers program, instruction card to computer personally/program tester to be compiled
Receives printed instruction card and program printout
Errors?
No
Yes
Debugs program
Returns corrected program to computer
Delivers printout/instruction cards/program deck to lead operator/supervisor
End

26. GIVEN A REQUEST TO CHANGE AN EXISTING PROGRAM, THE WORKER CHANGES EXISTING COMPUTER PROGRAMS AS CIRCUMSTANCES DICTATE. (1 task sheet)

Receives request to make change from supervisor
Discusses orally with supervisor method of accomplishing request
Codes approved solution
Tests and corrects solution
Writes change

SUPPLEMENTARY STEP: Calls user representative if necessary when coding

27. GIVEN A NUMBER OF A PROGRAM BY SUPERVISOR, THE WORKER MAKES PRESCRIBED CHANGES TO COMPUTER PROGRAM TO BE COMPATIBLE TO NEW COMPUTER. (1 task sheet)

Receives program number of program to be changed from supervisor
Pulls program from file cabinet
Checks list of changes to be made
Codes changes on program coding sheet
Keypunches changes on punched cards or gives to keypunch operator
Replaces change cards for old cards in program
Delivers to computer operator to be run on computer
Files program with changes back into file cabinet according to program number

SUPPLEMENTARY STEP: Makes additional changes if program shows errors (does not compile) after being run on computer

28. GIVEN A REQUEST TO WRITE A PROGRAM, THE WORKER DEVELOPS A TIME SCHEDULE FOR A PROGRAM. (1 task sheet)

Receives request from supervisor or department head to write a program
Plans a time schedule for the steps to be taken in preparing that program
Handwrites a tentative time schedule
Submits time schedule to supervisor

2.6 ELECTRONIC DATA PROCESSING, RELATED

29. GIVEN VARIOUS MATERIALS SUCH AS COMPUTER PRINTOUTS/FILES/ACCOUNTING FORMS/MANUALS/MAPS/INSTRUCTIONS, THE WORKER PERFORMS TASKS RELATED TO ELECTRONIC DATA PROCESSING. (22 task sheets)

ACQUISITION

RECEIVES

computer printout of daily production/"paid-in-full" sheet from computer room/reorder tickets from Data Processing/weekly accumulative computer printout of production/basic contract/booklet/claim form/client file/coding manuals/customer invoice/distribution list/insurance applications/invoices/maps/modification information/new program documentation/photocopies of report/purchase order for Data Processing/production control sheet/draft of wire/report/request for repair/requisition/rough draft of technical write-up/

shipping tickets/symbol instructions/tab listings, work orders/warranty books/telephone inquiries/copies of ID card from computer service/work sheet/preassembled cards

PROCESS

SORTS
cards/purchase orders/renewal sheets requisitions/service orders

Assigns
number to modification form

Pulls
payment cards/previous month's production report

Instructs
employees in coding method/MTST on set up

Answers
students questions

Codes
claim information for processing/information onto application form/job contracts/materials on composer/service orders/wire

Compares
invoices with shipping tickets by serial numbers/serial numbers with listing of card/totals with printout

CHECKS
master file with new documentation/overdue accounts/students' work/panel for input information stock numbers and amounts/units and stock code numbers

Scans
booklet

COMPUTES
measure count with slide rule/book value of stamps/requisition groupings/ daily report/invoice amounts

Counts
units for tab set

Arranges
repair service schedule

Draws
lines to define areas on map with colored pencils/symbols with typits and templates

TYPES
booklet/draft of write-up/ID card/envelopes from distribution list/information on cards from work sheet/invoice information on card/label for card/ modification of program/information from production control sheet on liquid process master/material on composer/MTST/new program documentation

RECORDS
computer information on typing request/book orders for service/cross-reference invoices, shipping tickets/daily production figures/premium/ insurance premium/stock numbers/purchase order by vendor, date, and price

Posts
stock number, serial number, invoice number to order book

Removes
outdated cards from bulletin board

Stamps
date on each card/"paid-in-full" on payment card

Writes
bill for renewal/code on renewal slip/code, date, account number on adding machine tape/order prices on invoices/street name and number on 3x5 card from map/unit number and code number/units and stock code numbers on requisition

Corrects
all purchase order differences

Proofreads
booklet/liquid process master/modification form/rough draft of write-up

Verifies
claim/invoice amounts with reorder tickets

Attaches
bill for payment of premium to file/copy of wire to message/correct forms to application/label to card/MTST tapes to machine/renewal slip to bill

Batches
claims for keypunching/invoices/3x5 cards by street name

Collates
booklet

Obtains
approval of booklet/draft of publication/approval of modification form

DUPLICATES
copies of program documentation/production report

DISPOSITION

CALLS
engineer to pick up report

DELIVERS
cards to another worker/cards to Keypunching/file to supervisor/final copy of report/master to Duplicating/message copies to sender/typing request to supervisor

Sends
booklet to print shop for copies/cards to tab room/ID tabs to other departments/purchase orders, invoices to Data Processing for computer input/invoices to Production/modification form to print shop/program documentation to users/renewal slip, bill to Shipping/tapes, requisition to Keypunching/teletype wire

Distributes
copies of booklet/modification form to Personnel/report photocopies

FILES
car cards/current reports/invoices/master copy of modification/returned requisitions/shipping tickets/warranty booklets/insurance application in client's folder

Destroys
orders from salesman's order book/printout sheet

MAILS
acknowledgment of claim letter/map and coded 3x5 cards to district/photocopies of report

REPORTED CRITERIA: "Extreme accuracy in totaling; Tact, diplomacy in handling students; Close checking of printouts as input for draftsman designs; Technical terminology; Ability to compare numbers; Understand why errors are errors"

HARDWARE

Automatic typewriter
(MTST)
Bulletin board
Calculator
Colored pencils
Electrostatic copier
Stamp "paid-in-full"
Slide rule
Tapes for MTST
Teletype
Templates
Adding machine (10-key)
Typewriter
Typits

SOFTWARE

Applications/booklet
Cards (3x5)
Code book
Computer printout
Contracts/forms
Liquid process masters
Invoices/maps
Modification form
"Paid-in-full" sheet
Payment card
Production control sheet
Production report
Purchase order
Shipping tickets

EDUCATIONAL CUES

Coding
Computational skills
Duplicating
Typing (including MTST)

30. GIVEN SOURCE DOCUMENTS SUCH AS ORDERS/INVOICES AND PUNCHED CARDS/PRINTOUTS, THE WORKER COMPARES AND VISUALLY SIGHT CHECKS SOURCE DOCUMENTS WITH COMPUTER PRINTOUTS/LISTINGS. (42 task sheets)

Receives punched cards/complete, incomplete source documents/orders/reports/listings/printouts
Compares source documents with reports/listings
Sorts source documents as to type
Reconciles computer run totals with control sheet totals
Determines errors and reasons for errors on source documents/printouts
Informs person or department of errors
Requests information for incomplete source documents
Pulls documents from files to fill in incompletions
Files reports/source documents according to job number
Records corrections on source documents/reports/listings
Operates check signing machine
Keypunches cards for those with errors
Sends reports/source documents/printouts/listings to originating departments/Keypunching/customers/Accounting

ELECTRONIC DATA PROCESSING CRITICAL INCIDENTS

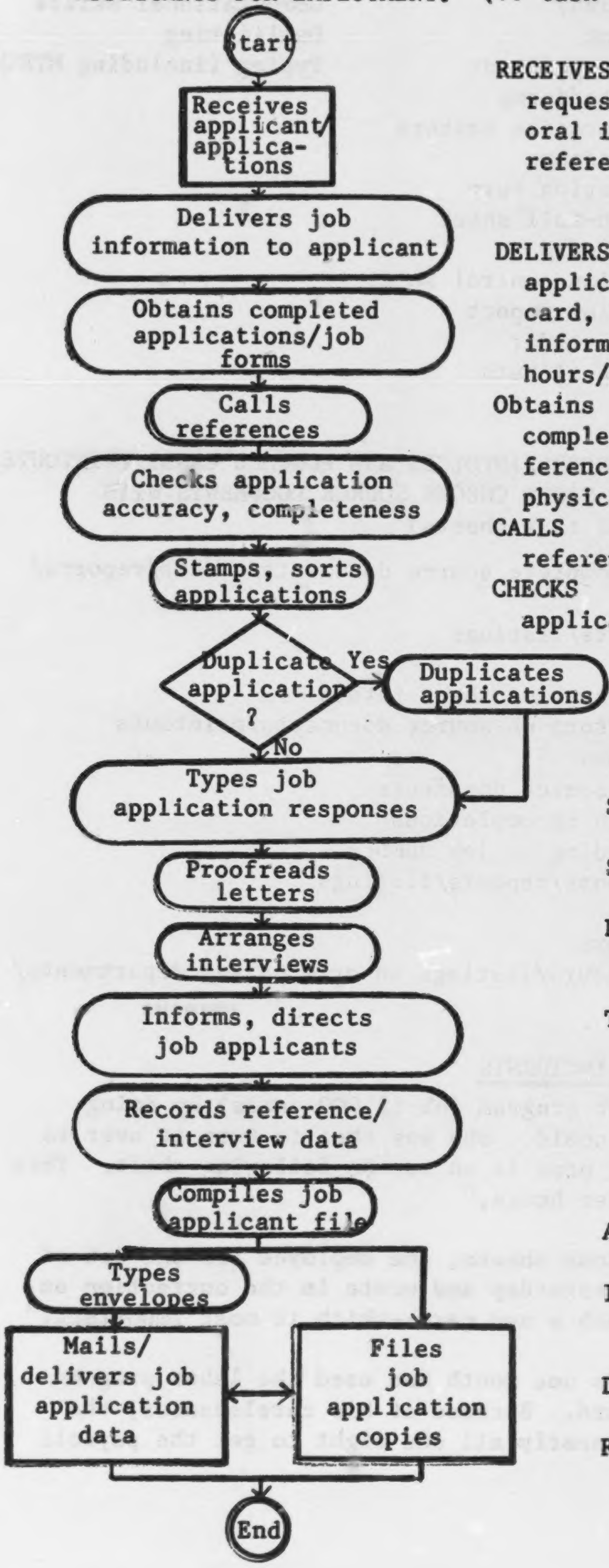
"The worker was asked to handle a rush program job (2,000 cards) by doing as much as she could as fast as she could. She was then to turn it over to the girl on the next shift who would pass it on to the following shift. This worker finished the whole job in three hours."

"When an error is found in the printout sheets, the employee has the job of correcting it. She found an error yesterday and wrote in the correction on the printout sheet but forgot to punch a new card--which is most important."

"The worker punched the payroll cards one month and used the labor program card rather than the time program card. Because of his carelessness, the entire accounting staff had to work nearly all one night to get the payroll processed on time."

3. PERSONNEL

1. GIVEN APPLICANTS, THE WORKER PROCESSES APPLICATIONS AND SCREENS APPLICANTS FOR EMPLOYMENT. (60 task sheets)


Start
Receives applicant/ applica-tions
Delivers job information to applicant
Obtains completed applications/job forms
Calls references
Checks application accuracy, completeness
Stamps, sorts applications
Duplicate application ?
Yes
Duplicates applications
No
Types job application responses
Proofreads letters
Arranges interviews
Informs, directs job applicants
Records reference/ interview data
Compiles job applicant file
Types envelopes
Mails/ delivers job application data
Files job application copies
End

ACQUISITION

RECEIVES
request for application form/resumes/ oral information to write letters/ reference forms/visitors

PROCESS

DELIVERS
application to applicant/life insurance card, ID card, medical form, W4 form/ information regarding job openings, office hours/personnel security questionaire

Obtains
completed application form/list of references/results of previous day's physicals/application file, card

CALLS
references for verification

CHECKS
application form for completeness/ eligibility/classification/file for previous application, codes/ coded number, name of reject/ printout for information on employee/type of work requested

Stamps
date on application

SORTS
applications

DUPLICATES
verification of employment/ applications

TYPES
labels/response to application letter/report-for-duty card/payroll authorization/reject letters on MTST/personal data card/reference rating sheet/teaching permit and contracts/references/pass card

Arranges
interviews/physical examinations

INFORMS
applicants who did not pass physical examinations

Directs
applicants to interview area

RECORDS
date mailed/reference sent and to whom/physical examination on card/ interview information

COMPILES
  file on applicant
Attaches
  label to folder, references to application

DISPOSITION

FILES
  copy of application/application form/carbon copy of letters/card, copy of teachers contracts
MAILS
  form rejection letter/request to appear for interview
DELIVERS
  application to interviewer/physical examination form to supervisor
Refers
  client to another office

SUPPLEMENTARY STEPS: Fingerprints employee; Photographs employee; Weighs mail

HARDWARE

Duplicator
Typewriter
MTST
Telephone

SOFTWARE

Application forms
Envelopes
Job opening/rejection form letters
Labels for files
Salary schedule
Computer printouts

EDUCATIONAL CUES

Duplicating
Typing
Filing (alphabetically)
Checking
Proofreading
Operation of MTST
Communication skills
Medical terminology

REPORTED CRITERIA: "Courteous; Give correct instructions; Must type 45 wpm on electric typewriter; Good judgment; Detailed work; Must be able to spot errors or ommissions; Tact; Handle different situations well; Reword form letter if necessary; Check details carefully; No confidential information sent; Pleasant; Keep up to date"

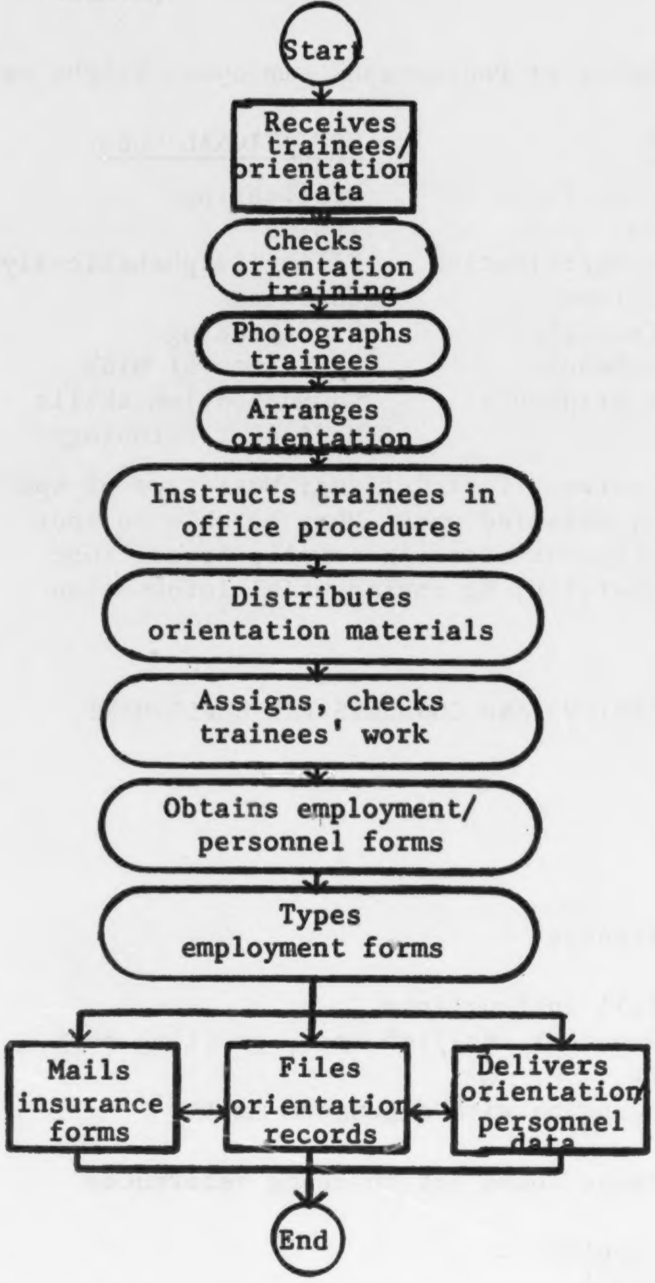
2. GIVEN APPLICANTS, THE WORKER INTERVIEWS AND CONDUCTS PRE-EMPLOYMENT TESTING. (36 task sheets)

Receives job applicants/applications
Pulls applicant's file
Discusses application, position
Interviews applicant
Checks records/application for completeness
Distributes test materials
Explains tests to applicants, gives full instructions
Administers tests to applicants (typing test, English test, spelling test, shorthand test)/(retests) if necessary
Collects/corrects/evaluates tests by grading with a punched master
Records interview/test results
Obtains signature of applicant on release forms for checking references
Compiles applicant files
Delivers payroll processing forms to applicant
Sends payroll processing forms to Payroll

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Job applications	Accuracy
Stop watch	Punched test masters	Checking
	Tests and test materials	Typing
		Communication skills
		Courtesy

REPORTED CRITERIA: "Pleasant, should be able to make decisions whether applicant should be tested; Make applicant feel at ease; Skilled in interpersonal relations; Appear calm, high degree of flexibility in handling people and different situations and problems; Patience, common sense required"

3. GIVEN TRAINEES, THE WORKER ORIENTS AND INSTRUCTS NEW EMPLOYEES. (37 task sheets)


Start
Receives trainees/ orientation data
Checks orientation training
Photographs trainees
Arranges orientation
Instructs trainees in office procedures
Distributes orientation materials
Assigns, checks trainees' work
Obtains employment/ personnel forms
Types employment forms
Mails insurance forms
Files orientation records
Delivers orientation/ personnel data
End

HARDWARE

Typewriter
Camera

SOFTWARE

Employment forms, time cards
Rules and regulations booklet
Training manuals
Birth certificates, transcripts
Insurance policies

EDUCATIONAL CUES

Accuracy
Typing
Using camera
Filing
Checking

REPORTED CRITERIA: "Explain insurance program satisfactorily; Be organized and have all materials ready ahead of time; Type error free; Do not treat trainees with overbearing manner; Courtesy; Avoid humiliation; Ability to communicate and teach effectively; Trainee will be able to figure amounts when supervisor needs them; Tact in dealing with others; Use good grammar"

ACQUISITION

RECEIVES
applications/employee/salary card/oral information that educational courses will be offered for company personnel/calendar of training sessions/instructions to prepare orientation

PROCESS

CHECKS
supplies for trainees, orientation programs

RECORDS
employment dates/employee data on plaque for photograph/personal information for personnel file

Photographs
trainees

Arranges
schedules of new employees for orientation program/trainees in sections/rooms for teaching of courses in hotel management, maintenance

Instructs
employees in telephone techniques, 10-key adding machine operation/how to write orders/typing of envelopes and mailing procedures/language peculiar to office/uses of different office forms/format for reports/locations of office forms and files/correspondence format/switchboard operation/trainees in company policy, W4 forms, insurance program, employment forms, reference manuals

Distributes
booklets of rules and regulations/oath of office card/employment forms to employees/packets of trainee materials/work to trainees

Assigns
sample work/regular work to trainees

CHECKS
sample work done by trainees/trainees' work for the first four months

Obtains
employees signature/completed employment forms/birth certificate/transcripts/approval on manual revisions

TYPES
insurance enrollment card/list of insurance enrollees/employment forms/training manuals/schedule of courses to be offered/fluid process masters on notification of course offerings

DISPOSITION

FILES
orientation record

Distributes
information regarding educational courses offered to all departments

DELIVERS
insurance policy to employee/withholding forms to Payroll/list of educational courses to training assistant

MAILS
insurance enrollment card to insurance company/course schedules

SUPPLEMENTARY STEPS: Develops photograph of employee; Laminates photograph of employee; Fingerprints employee; Administers oath of office to employee; Duplicates course schedule

4. GIVEN EMPLOYMENT FORMS,QUESTIONNAIRE WORK SHEETS, AND APPLICATION COPIES, THE WORKER COMPILES PERSONNEL DATA ON NEW EMPLOYEES. (21 task sheets)

ACQUISITION

RECEIVES
employment forms/copy of application/authorization for security clearance/ questionnaire work sheet/employment verification request

PROCESS

CHECKS
for accuracy/confirmation of employment/references

TYPES
employment forms such as tax forms, personal record change card, insurance form, ID card/master index card/labels for files/list of new hirees/ employee status sheets/absentee record/retirement form/salary history cards/ time cards/eligibility forms for Payroll

RECORDS
name and personal data/date of application/medical approval/attendance record card

Codes
benefits

DUPLICATES
application forms/insurance forms

COMPILES
new employee folder

Labels
new employee folder with name, number

DISPOSITION

DELIVERS
birth certificate/diploma/car stickets/ID card/to employee

Routes
application to proper person/folders to Payroll

FILES
completed employment forms/master index card/rejected applications/insurance card/employee folder/reports

SUPPLEMENTARY STEPS: Punches card for Data Processing; Assigns time clock number to new employee

REPORTED CRITERIA: "Good appearance, tact; Check details; Extreme accuracy; Ability to follow through; Check information carefully"

SOFTWARE

Code book
Labels
Forms
Job applications

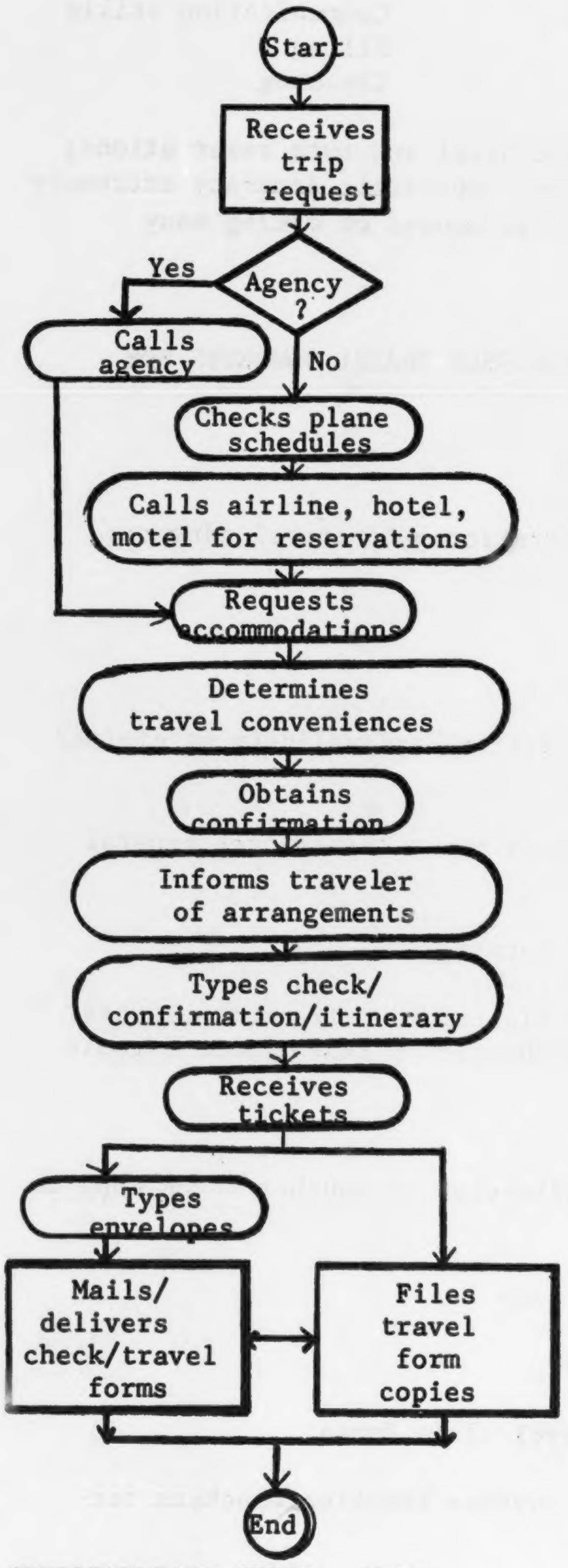
EDUCATIONAL CUES

Typing
Filing
Checking
Coding

HARDWARE

Typewriter
Duplicator

5. GIVEN A WRITTEN/ORAL REQUEST, THE WORKER MAKES TRAVEL ARRANGEMENTS FOR EMPLOYEES. (18 task sheets)


Start
Receives trip request
Agency ?
Yes
No
Calls agency
Checks plane schedules
Calls airline, hotel, motel for reservations
Requests accommodations
Determines travel conveniences
Obtains confirmation
Informs traveler of arrangements
Types check/ confirmation/itinerary
Receives tickets
Types envelopes
Mails/ delivers check/travel forms
Files travel form copies
End

SUPPLEMENTARY STEPS: Makes cancellations on reservations when necessary; Assigns coded job number to travel authorization form

ACQUISITION

RECEIVES
  oral/written request

PROCESS

CALLS
  travel agency/travel department/motel/hotel/to confirm reservations
CHECKS
  plane schedules
Requests
  accommodations desired/date of arrival/length of stay/date, time of departure
DETERMINES
  most effective route/most convenient flight/necessity of car rental/whether other transportation will be used
Arranges
  accommodations such as plane flight, hotel, motel, auto rental, or state car use
Obtains
  confirmation of reservations
INFORMS
  requestor of arrangements/company transportation agent/travel agency to make reservations
TYPES
  authorization for travel request/check request/confirmation form/travel reimbursement voucher/petty cash request/itinerary for traveler
Obtains
  signature on travel reimbursement voucher
RECEIVES
  tickets

DISPOSITON

FILES
  travel authorization/form copies
DELIVERS
  travel form/check request to Business Office/confirmation form to employer/information to traveler /travel reimbursement voucher to Purchasing/tickets to supervisor
MAILS
  tickets to traveler

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Plane schedules	Typing
Telephone	Check requests	Communication skills
	Travel forms	Filing
	Rate sheets	Checking

REPORTED CRITERIA: "Knowledge of how to make hotel and auto reservations; Read plane schedules; Correct information very important; Accuracy extremely important; Knowledge of geography; Withstand pressures of making many reservations at once"

6. GIVEN A LIST OF EXPENSES, THE WORKER PROCESSES TRAVEL VOUCHERS FOR EMPLOYEES. (10 task sheets)

ACQUISITION

RECEIVES
  travel expense vouchers/travel book/vouchers for paid travel advances

PROCESS

Stamps
  expense vouchers with date
CHECKS
  for accuracy/receipts with travel authorization card/validity of claims/mileage
COMPUTES
  expense account total/allowances at 11 cents per mile/balances general ledger/journal totals
Corrects
  expense voucher amounts/expense category totals
RECORDS
  total of travel voucher/advances/expense figures to different accounts/travel request in travel log/date mailed/changes of travel made enroute
Posts
  advances in journal
Attaches
  authorization slip to expense statements/receipt to voucher/check copy to voucher
TYPES
  letter to send with check/travel claim forms

DISPOSITION

MAILS
  letter, reimbursement/advances/check/travel claim forms
DELIVERS
  forms to Accounting/division office for further checking/vouchers for payment
FILES
  travel authorization slips/expense statements/receipts/travel claim form

SUPPLEMENTARY STEP: Duplicates voucher

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Travel voucher forms	Checking
Typewriter	Check	Accuracy
Hand stamp	Travel book, log	Computational skills
		Typing
		Filing

REPORTED CRITERIA: "Expense statements are verified and voucher completed; Check figures correctly; Accounting procedures knowledge; Accuracy most important"

7. GIVEN EMPLOYEES NEEDING RIDES, THE WORKER CHECKS OUT CITY CARS OR ARRANGES CAR POOLS. (2 task sheets)

Receives oral request for transportation from employer
Delivers transportation card to employee to complete
Checks card for completion
Arranges car pool
Delivers keys to employee
Records vehicle/car pool information in log

8. GIVEN ABSENTEE REPORTS, UNION CARDS, AND REQUESTS FOR LEAVE, THE WORKER COMPILES PAYROLL INFORMATION FROM PERSONNEL RECORDS. (23 task sheets)

ACQUISITION

RECEIVES

telephone call from ill employee/department reports/time and attendance cards/moving expenses of employee/operations cards of minutes worked per job, amount to be paid/notification of pay rate change/payroll questions/salary deduction form/union cards/absentee reports/request for leave/termination notice

PROCESS

INFORMS

department manager of employee absence

Pulls

personnel record card/ID payroll punched card/manual of procedures/applicant separation folder

CHECKS

number of leave days left/overtime/payroll punched card with operations cards/job title with wage/personnel records/completion of salary deduction form/attendance records

Writes

employee name, badge number, department, payroll number, address, last day worked on form

RECORDS

date, reason for absence/absence/holidays/overtime/employee name/taxable portion of moving expenses/time sheet information/request for payroll adjustment/date of return from leave/personnel change notice

TYPES
  employee information on cover sheet, tab of folder/leave slip/report on non-taxable items/rate change form/absentee form/disciplinary letter/appointment notice/termination notice
Obtains
  attendance sheets/approval of rate changes/adjustment sheet

DISPOSITION

Distributes
  disciplinary letters to department head/personnel papers for signatures
DELIVERS
  union dues deduction card to Payroll/time attendance cards to Payroll/adjustment sheet/payroll deduction form
FILES
  employee folder/time cards/matched operations and ID payroll punched cards/copy of rate change/union cards/leave of absence forms/copy of probationary forms/copy of termination form
MAILS
  rate changes/adjustment forms/probationary forms to employee

SUPPLEMENTARY STEP: Compiles folder on ill employee

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Employee folders	Typing
Telephone	Leave slip	Filing (numerical, alphabetical)
Hand stamp	Personnel forms, cards	Checking
		Accuracy

REPORTED CRITERIA: "High degree of accuracy; Know company policy; Pressure; Cooperative attitude; Patience, understanding; Work under pressure"

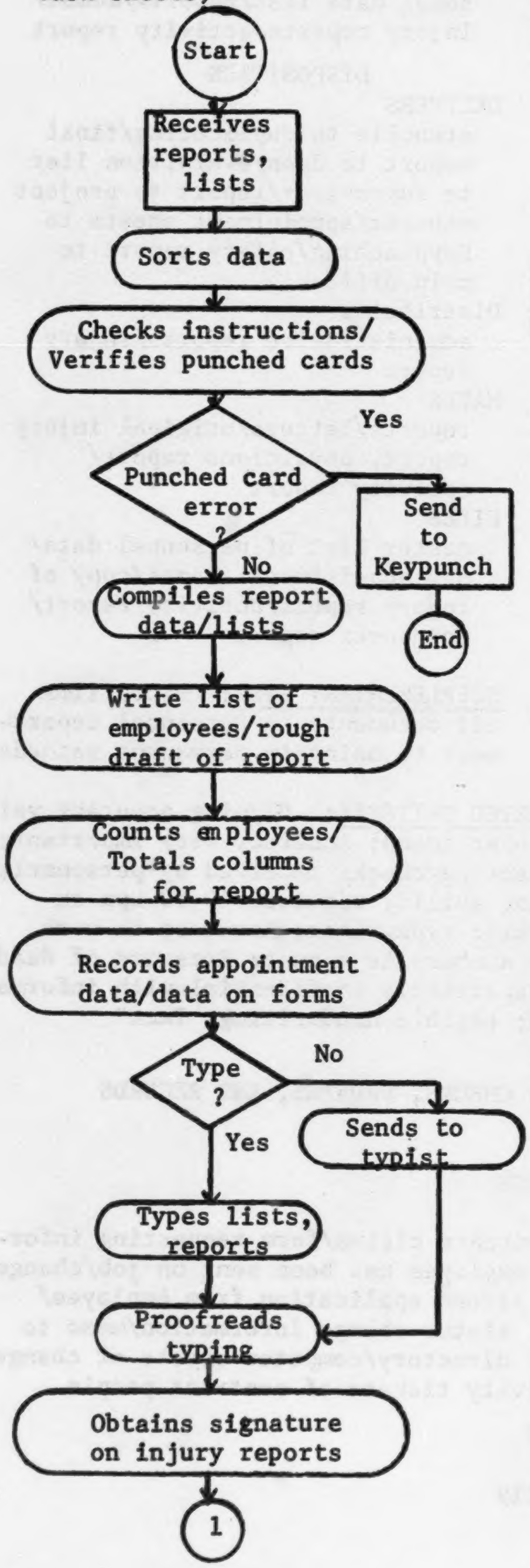
PERSONNEL CRITICAL INCIDENTS

"Some applicants are hesitant about entering the agency. This particular worker makes them feel welcome, at ease, and is particularly gracious in answering their questions. In one particular case, she made a highly specialized, mature applicant feel welcome, so that the applicant stayed, was interviewed, and was later sent on a very difficult-to-fill position which worked out very happily for company, customer, and employee."

"On a few occasions this employee has sent out letters where she typed "Mrs." instead of "Mr." These were sent to very important people and has caused much embarrassment for the Personnel Office."

"The worker wrote too much personal information on a verification of employment form that was being sent to another company. It is our policy only to answer certain questions on these forms and not give any financial information on the employee."

9. GIVEN SOURCE DOCUMENTS SUCH AS PERSONNEL LISTS, APPOINTMENT CARDS, AND ROUGH DRAFTS, THE WORKER COMPILES AND TYPES PERSONNEL REPORTS. (35 task sheets)


Start
Receives reports, lists
Sorts data
Checks instructions/ Verifies punched cards
Yes
Punched card error ?
Send to Keypunch
End
No
Compiles report data/lists
Write list of employees/rough draft of report
Counts employees/ Totals columns for report
Records appointment data/data on forms
No
Type ?
Yes
Sends to typist
Types lists, reports
Proofreads typing
Obtains signature on injury reports
1

ACQUISITION

RECEIVES
written information/list of personnel/rough drafts/oral instructions/lists of new personnel appointments/punched cards on new appointments/population count/report of injury/daily log on office/quarterly overtime report/turn-over report/transfer termination

PROCESS

SORTS
according to department/according to sex/number of sick days/absences

CHECKS
instructions/permanent record cards/for number of copies needed

Verifies
punched cards on new appointments

COMPILES
data for report/monthly report on significant accomplishments for month/vacation list/information for activity report

Writes
names of employees due for evaluation/all changes made/rough draft of report/keypunch instructions on new appointment sheet/order form for duplication on number of copies/accident safety report/daily activity reports

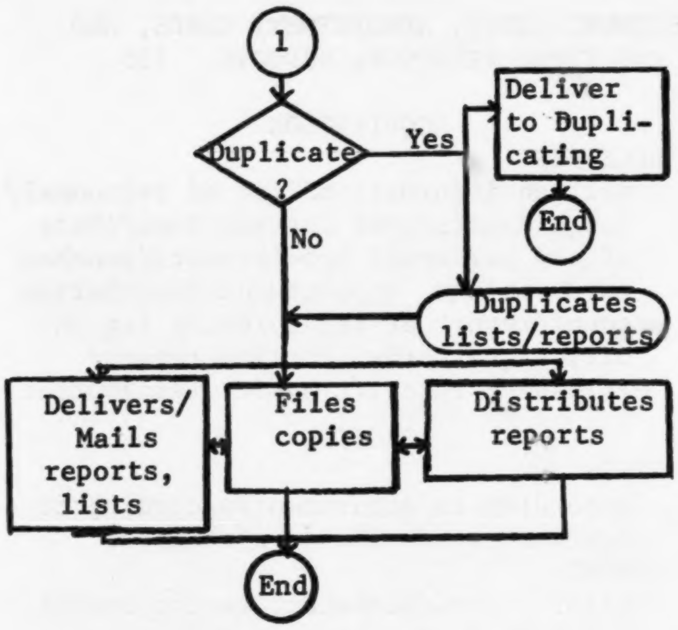
Counts
employees hired, resigned, or laid off during the month

Totals
comumns for report

RECORDS
data from new appointment sheet/population data on manpower count form

TYPES
retirement list/oath of office lists/reports/letters/stencils/employees to be evaluated lists/weekly payroll changes/ditto list of employee's personal data/master list by department of personnel data/memo noting changes in population count/injury report/activity report/overtime report/safety memo/accident summary/retroactive payroll

Obtains
signature of doctor/nurse on injury report



HARDWARE

Typewriter
Duplicator
Blueprint machine
Adding machine

SOFTWARE

Punched cards
Masters for duplication

EDUCATIONAL CUES

Proofreading
Typing
Duplicating
Accuracy
Checking
Computational skills

DUPLICATES
population count/employee personal data list/reports/memos/injury reports/activity report

DISPOSITION

DELIVERS
stencils to duplicating/final report to dean/evaluation list to supervisor/report to project manager/appointment sheets to Keypunching/safety report to main office

Distributes
administrative reports/injury report

MAILS
reports/letters/original injury report, physicians report/activity report

FILES
master list of personnel data/new appointment sheets/copy of injury report/activity report/turn-over report

SUPPLEMENTARY STEP: Microfilms all documents in Personnel department to maintain permanent records.

REPORTED CRITERIA: "Typing accuracy valued over speed; Accuracy very important; Correct paychecks received by personnel; Typing ability required 40-50 wpm on electric typewriter; Accuracy in work with numbers is a must; Pressure of deadlines, strictly confidential with information; Legible handwriting; Tact"

10. GIVEN PERSONNEL CHANGES, THE WORKER CHECKS, UPDATES, AND RECORDS PERSONNEL FILES. (46 task sheets)

ACQUISITION

RECEIVES
approved employment forms/mail/insurance claims/form requesting information on termination/notice that employee has been sent on job/changes of status or address form/tuition refund application from employee/employee lists/address, telephone, status change information/memo to update overhead files and personal directory/computer sheets of change/visitor/materials to be filed/activity tickets of contract people

PROCESS

SORTS
mail/insurance claims alphabetically

COMPILES
file on new employee

CHECKS
employment form/effective insurance date/with customer to see if worker arrived on job/personnel record/grades/tuition/to see if employee is doing job-related task/computer sheets for initials, date, and termination/files for desired information/benefits and insurance information for visitor/automatic salary increase/activity tickets

(Updates)
status cards/records to show moves from department to department/forms to update/overhead file/personal directory/clock number

RECORDS
personnel changes/insurance changes/personal data/new employee data/new information on personnel record/changes from computer sheets

Writes
employers certifications for insurance claims/amount to refund/contract information in notebook

TYPES
insurance claim forms/personnel report listing workers, hours for the week/payroll, overtime listing/salary review forms/new time cards/address changes/job classification card/personnel information on personnel history card/labels for folders/personnel changes

DUPLICATES
forms on termination information

DISPOSITION

DELIVERS
changed notice to Addressograph/activity tickets to Keypunching/change notices to Payroll/refund form to supervisor/computer sheets of change to Payroll/information to employee regarding salary increase

Distributes
mail/salary review forms to department heads

FILES
copies of termination information form/employers certification for claims/course approval form/ personnel history card/employee folder/insurance change report/various materials collected in baskets

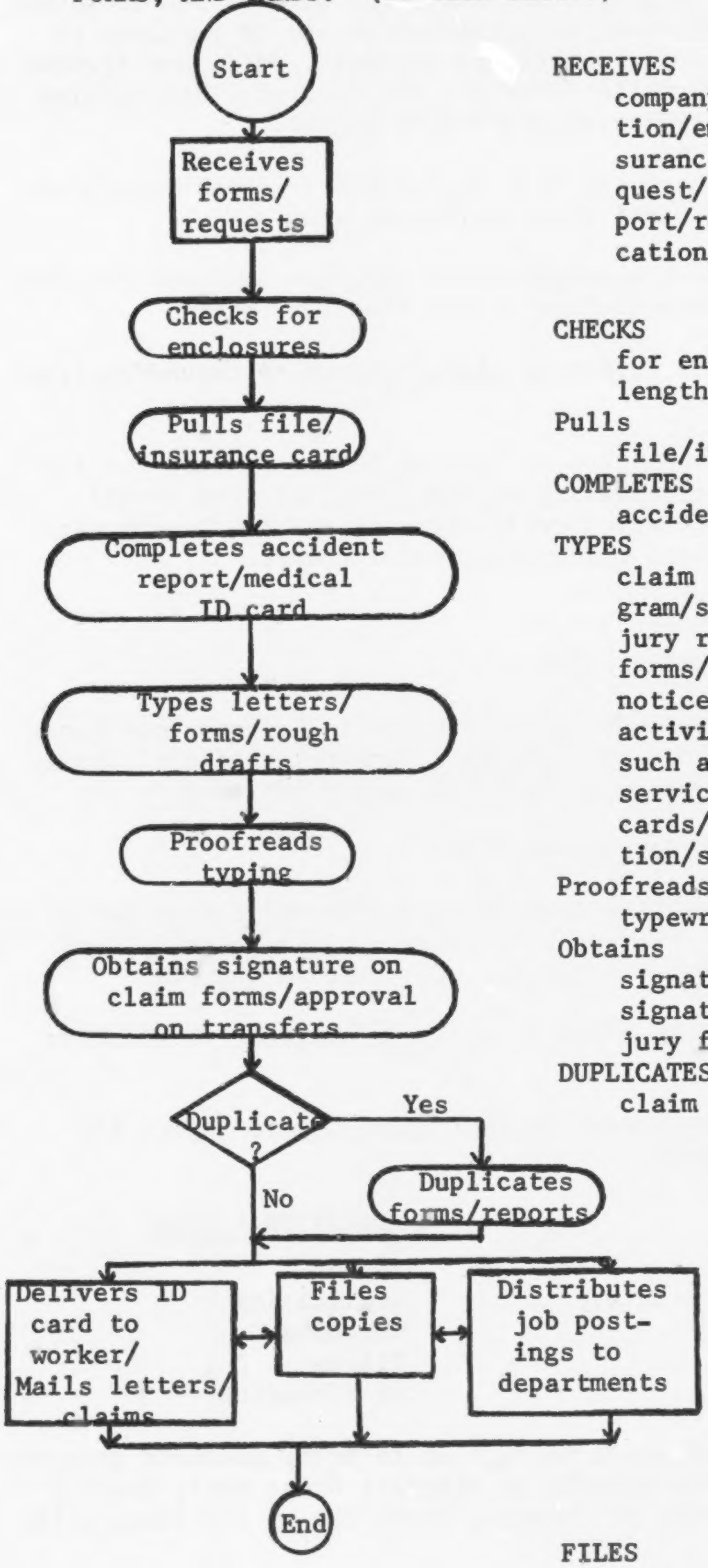
MAILS
approved employment form/claim check to employee/original termination information form

SUPPLEMENTARY STEP: Calls employee with highest seniority to report for work; Stamps date on forms received.

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Personnel cards/lists	Typing
Duplicator	Personnel directory	Duplicating
Hand stamp		Checking
Files		Filing
		Proofreading

REPORTED CRITERIA: "These records must be kept up to date; Accurate records on each employee; Courtesy; Follow through on details; Great tact; Control temper; Ability to retain knowledge of changes; Knowledge of insurance policies."

11. GIVEN DOCUMENTS SUCH AS ROUGH DRAFT LETTERS, EMPLOYMENT FORMS, AND CLAIMS FORMS OR ORAL INSTRUCTIONS, THE WORKER TYPES PERSONNEL LETTERS, FORMS, AND CARDS. (31 task sheets)


Start
Receives forms/ requests
Checks for enclosures
Pulls file/ insurance card
Completes accident report/medical ID card
Types letters/ forms/rough drafts
Proofreads typing
Obtains signature on claim forms/approval on transfers
Duplicate ?
Yes
No
Duplicates forms/reports
Delivers ID card to worker/ Mails letters/ claims
Files copies
Distributes job postings to departments
End

ACQUISITION

RECEIVES
    company recreation activity information/employment forms/printouts/insurance claim forms/telephone request/insurance check/accident report/rough draft of letters/application/oral instructions

PROCESS

CHECKS
    for enclosures/number of carbons/length of letter
Pulls
    file/insurance card
COMPLETES
    accident report form/medical ID slip
TYPES
    claim information on claim form/telegram/status forms/reject letters/injury report/form letter/employment forms/letters/rough drafts/separation notices/notice of company recreation activity/forms for use in Personnel such as purchase orders, memos/civil service Payroll forms/weekly time cards/roster cards/transfer information/salary payment forms
Proofreads
    typewritten materials
Obtains
    signature on claim form/employee signature on insurance form, injury form/approval on transfer forms
DUPLICATES
    claim forms/injury report/transfers

DISPOSITION

DELIVERS
    medical ID to worker/notices for bulletin board posting/new time cards to departments
Distributes
    job postings to departments for posting
MAILS
    claim form to insurance company/insurance claim check/letters/copy of separation notice to Payroll
FILES
    copy of claim form/hospital bill/injury report/copy of letters, forms/transfer forms

HARDWARE

Typewriter
Duplicator
Hand Stamp

SOFTWARE

Letters
Claim forms
ID cards
Checks

SUPPLEMENTARY STEPS: Stamps time on claims; Transcribes dictated materials; Takes dictation; Draws bar graph for job salary studies.

EDUCATIONAL CUES

Typing
Filing
Checking
Accuracy
Neatness
Shorthand and transcription

REPORTED CRITERIA: "Accurate information sent as soon as possible, neat letters and erasures; Good English skills required; Ability to compose interesting notices from drafts or rough facts; Close attention to detail; Drafting ability where needed; Ability to interpret information from statistics to graph"

12. THE WORKER ISSUES PARKING PERMITS TO AUTHORIZED PERSONS. (1 task sheet)

13. THE WORKER ISSUES PASS CARDS TO EMPLOYEES. (1 task sheet)

14. THE WORKER ISSUES WORK PERMITS TO STUDENTS UNDER 18 YEARS OF AGE. (1 task sheet)

15. THE WORKER ISSUES SOCIAL SECURITY CARDS TO CUSTOMERS. (1 task sheet)

16. THE WORKER ISSUES WORKING PAPERS TO STUDENTS. (2 task sheets)

17. THE WORKER PROCESSES PAPERS FOR MERIT AWARDS AND ISSUES MERIT AWARD PINS. (2 task sheets)

18. THE WORKER ADMINISTERS TESTS TO APPLICANTS FOR COMPANY DRIVERS LICENSES. (1 task sheet)

19. THE WORKER ARRANGES ANNUAL AWARDS MEETINGS. (1 task sheet)

20. THE WORKER HANDLES ENTERTAINMENT TICKETS FOR PERSONNEL. (1 task sheet)

21. THE WORKER EXPLAINS LABOR CONTRACT ALTERNATIVES TO MEN WHO ARE SURPLUS (LAID OFF). (1 task sheet)

22. THE WORKER PARTICIPATES IN UNION/MANAGEMENT MEETINGS. (1 task sheet)

23. THE WORKER HANDLES LABOR GRIEVANCES. (2 task sheets)

24. THE WORKER PROMOTES HIGHWAY SAFETY AMONG SALESMEN. (1 task sheet)

4. PRODUCTION

1. GIVEN ROUGH DRAFTS OF PRODUCTION REPORTS/SCHEDULES/PRINTOUTS, OR INSTRUCTIONS TO COMPOSE A REPORT, THE WORKER COMPILES, TYPES AND/OR WRITES PRODUCTION REPORTS. (16 task sheets)

HARDWARE

Typewriter
Calculator
Adding machine (10-key)
Files

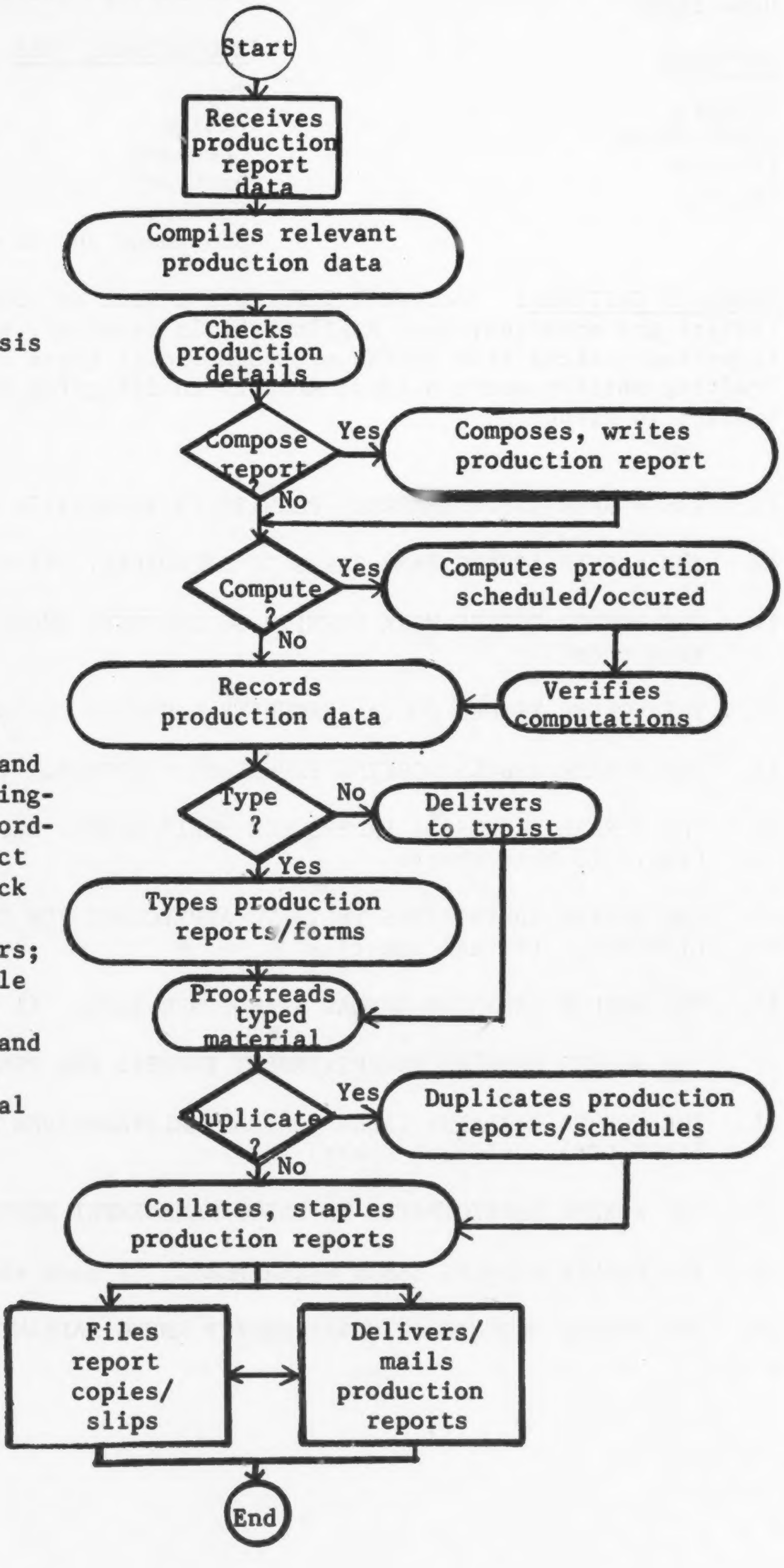
SOFTWARE

Weights book
Log book
Production reports/analysis sheets
File labels and tabs

EDUCATIONAL CUES

Accuracy
Typing
Computational skills
Proofreading
Checking
Filing

REPORTED CRITERIA: "Must be able to compile data and use it to compose a meaningful report; Accurate recording of information; Correct weights; Promptness; Check details very carefully; Know where to find answers; All copies must be legible making certain dates are correct, inserts there, and correctly placed; Report should have a good general appearance"


Start
Receives production report data
Compiles relevant production data
Checks production details
Compose report ?
Yes
Composes, writes production report
No
Compute ?
Yes
Computes production scheduled/occured
No
Verifies computations
Records production data
Type ?
No
Delivers to typist
Yes
Types production reports/forms
Proofreads typed material
Duplicate ?
Yes
Duplicates production reports/schedules
No
Collates, staples production reports
Files report copies/ slips
Delivers/ mails production reports
End

ACQUISITION

RECEIVES
final report/printouts/production slips, lists/rough draft of production report, schedule/report forms/raw data/instruction, notes/pre-production sheets/contracts/shipping tickets/analysis committee sheet

PROCESS

COMPILES
report from notes and other sources
SORTS
printouts by subject, dispatcher, area/reports by products/production slips by number/packing slips
CHECKS
production report against master information sheet for accuracy/notes, dates received/any new work on ad/that all questions are answered on work status/master sheets/engineers' product-report sheet
COMPOSES
production report
COMPUTES
total number units produced/difference between scheduled and actual amounts produced/weights/extensions/packing slip totals/balance to be produced/production hours for workers
Verifies
accuracy of computations
RECORDS
production information in log/total units produced on card/gain and loss amounts/date contract received/total productions/differences in production on production sheet/oral instructions for format/information on daily operations report
TYPES
production report/schedule on printed form, fluid process master/changes on master sheet/index labels, tabs for folders
DUPLICATES
production report/progress report/pre-production schedule
Collates, (staples)
report by hand

DISPOSITION

MAILS
contracts
FILES
production reports alphabetically, numerically/transfer reports/pre-production sheets/progress report/daily operations report/balance sheet/packing slips/analysis of renewal committee report/gain and loss report/(pelt) cutting reports/contracts/production schedules
DELIVERS
production report to department heads/summary sheets to Duplicating/gain and loss report to supervisor/reports of back orders to dispatchers, supervisor
Sends
copy of production report to company members/analysis files to credit assistant

2. GIVEN PUNCHED CARDS AND WORK ORDERS, THE WORKER SCHEDULES AND EXPEDITES PRODUCTION ORDERS. (23 task sheets)

ACQUISITION

RECEIVES
  punched cards of production operation data/work orders

PROCESS

CHECKS
  quantity of parts/schedules/credit references/labor costs/engineers' drawings/work orders/control cards/closing publication data/job number/specifications/completeness of orders
DETERMINES
  schedule adjustments/problem getting parts to Production/schedules for photography and layout for magazine/schedules for unapproved materials
TYPES
  printed forms/expenses on production orders/route cards/number of route card issues/bill for materials/date of job bid/work order/requisition for part/job information/production schedule from job ticket
Proofreads
  all typewritten materials
Assigns
  numbers to work orders/account numbers on bills
Totals
  expenses/cost of labor and materials
Obtains
  signatures on work schedules/approval of schedule
RECORDS
  production order on stock card/total weight of each order/machine-part-shortage sheet information/revised production schedule/assigned number on work order/press order/production data in log/changes on computer input sheet/keypunched card data on laboratory card/deadlines on work orders/instructions on printout sheet
Attaches
  punched cards to materials transfer list/stock cards to job tickets/printouts together
DUPLICATES
  production order/revised production schedule/field change orders

DISPOSITION

FILES
  copy of production schedule/production control/job tickets/job ticket ledger sheet/ press orders/field change orders/specifications/production control cards
Distributes
  final planning sheets throughout plant/control cards/copy of deadlines to various departments
DELIVERS
  shortage sheets to Production Materials/route, data cards to Production floor/work orders to engineer/press orders/drawings to Duplicating/ /requisition to Parts Procurement/materials transfer list to Expediting/

laboratory cards to Aerospace/job tickets to manager/grinding cards to filer/commercial schedules to Control room

MAILS

bills

SUPPLEMENTARY STEPS: Updates shortage sheets; Collates punched cards

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine (10-key)	Stock and job cards	Duplicating
Duplicator	Job tickets	Computational skills
Typewriter	Punched cards	Typing
	Computer sheets	Constant checking of records
	Rough production reports and schedules	Filing

REPORTED CRITERIA: "Ability to follow instructions; Make right decisions in adjustment or leveling off the production schedule; Accuracy; Proficient in typing and a basic knowledge of rules of filing; Be extremely explicit in writing detailed instructions; Check and organize details; Knowledge of every production step in ad production from beginning to end"

3. GIVEN A PRODUCTION PROBLEM, THE WORKER CONSULTS AND ADVISES POTENTIAL CUSTOMER. (1 task sheet)

Receives visitor
Studies problem presented by visitor
Makes suggestions on technical aspects of problem and capabilities of the department versus contract with vendor
Refers visitor to supervisor for additional help
Requests date work is needed
Checks status of work in-shop or with vendor, as requested
Delivers order to shop/vendor

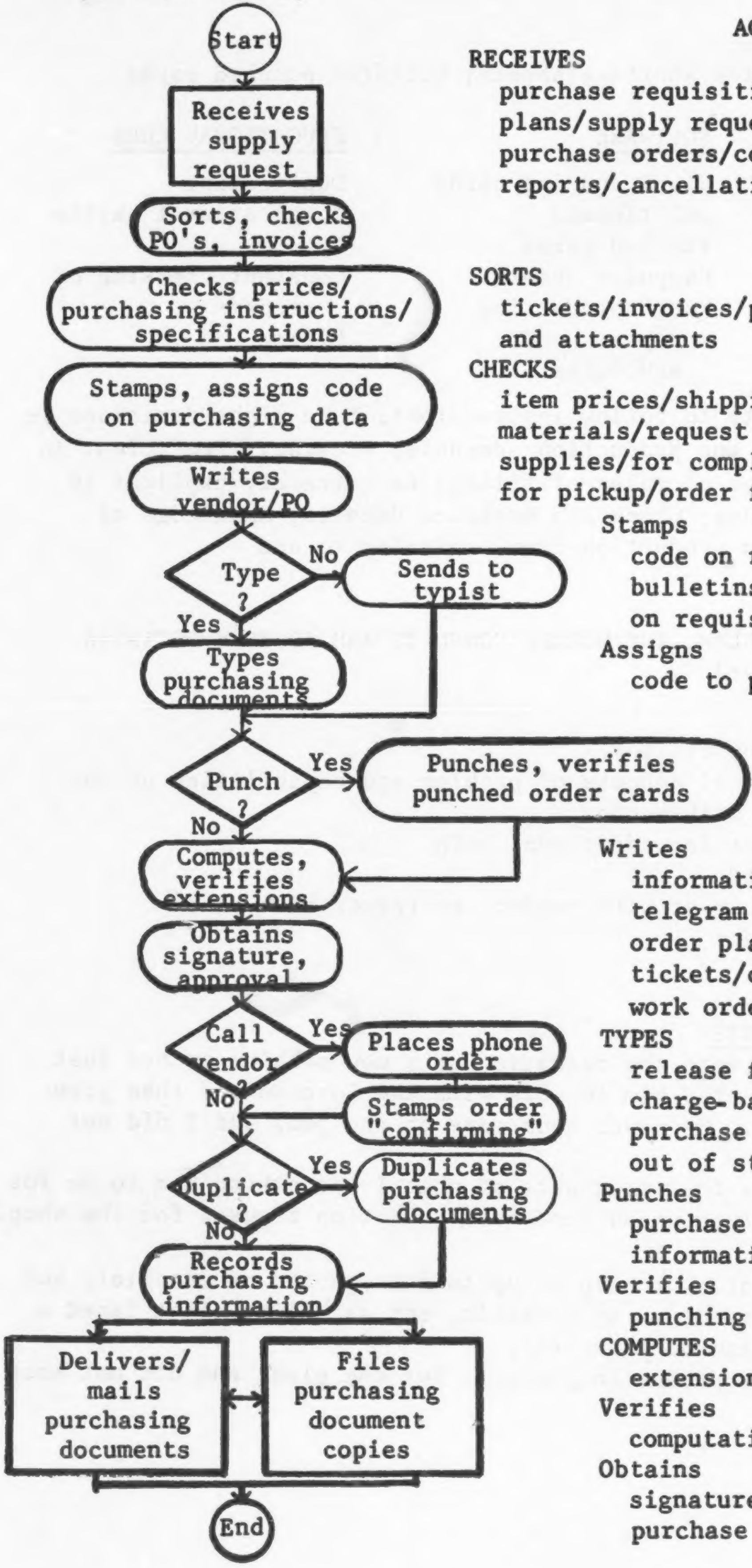
PRODUCTION CRITICAL INCIDENTS

"Once I asked him to check into the operation of a new machine we had just received in the shop. I wanted him to work with the foreman and then give me a report on the machine. He never took care of the job, and I did not get a report from him.
I don't think he understood the importance of what I was asking him to do for me. This information involved production cost reduction figures for the shop."

"When he first started he did not keep an up-to-date record of materials and parts on order and being ordered. As a result, our satellite plant faced a shut down because of shortage of materials.
He did not review the daily production records for the plant and did not keep his records current."

5. PURCHASING

1. GIVEN SOURCE DOCUMENTS SUCH AS, REQUESTS, INVOICES, PRINTOUTS, AND REQUISITIONS, THE WORKER PROCURES AND CONTROLS SUPPLIES AND STOCK. (94 task sheets)


Start
Receives supply request
Sorts, checks PO's, invoices
Checks prices/ purchasing instructions/ specifications
Stamps, assigns code on purchasing data
Writes vendor/PO
Type ?
No
Sends to typist
Yes
Types purchasing documents
Punch ?
Yes
Punches, verifies punched order cards
No
Computes, verifies extensions
Obtains signature, approval
Call vendor ?
Yes
Places phone order
No
Stamps order "confirming"
Duplicate ?
Yes
Duplicates purchasing documents
No
Records purchasing information
Delivers/ mails purchasing documents
Files purchasing document copies
End

ACQUISITION

RECEIVES

purchase requisition/invoice/(pelt) cutting plans/supply request cards/book title cards/ purchase orders/computer printouts/buyers reports/cancellation invoices/requests

PROCESS

SORTS

tickets/invoices/printouts/purchase orders and attachments

CHECKS

item prices/shipping instructions/sources of materials/request card with catalog/needed supplies/for complete information/clearance for pickup/order for signatures

Stamps

code on requisition/requisition/ bulletins with company name/number on requisition

Assigns

code to purchase orders

Locates

vendor with reasonable prices

Writes

information regarding orders on telegram forms/mark to indicate order placed in catalog/charge tickets/calendar order/needed items/ work orders/data on batch slip

TYPES

release form/check/requisition/ charge-backs (shortages or errors)/ purchase order, orders for materials out of stock

Punches

purchase order card/card with order information

Verifies

punching of card

COMPUTES

extensions/total all orders

Verifies

computations

Obtains

signature and/or approval on purchase orders and requisitions

CALLS
vendor for supplies/places order
DUPLICATES
requisition/purchase order/invoices
RECORDS
actual cost of item/goods received/number of purchase order/list of purchases

DISPOSITION

MAILS
release forms/shipping instructions/purchase orders to supplier/invoice to Accounting
DELIVERS
purchase order to Receiving/purchase order to Accounts Payable/vendor bills
FILES
copy of order/equipment report/charge-backs/requisitions by number/letter copy/statements

SUPPLEMENTARY STEP: Assigns number to purchase order

HARDWARE

Typewriter
Duplicator
Adding machine (10-key)
Microfilm
Telephone

SOFTWARE

Supplies/materials catalog
Purchasing forms

EDUCATIONAL CUES

Typing
Duplicating
Accuracy
Filing
Communication skills
Computational skills

REPORTED CRITERIA: "Basic math; Ability to spell correctly and write legibly; Aptitude for memory; Some pressure; Alert in numbering of sheets; Knowledge of microfilm reader operation; Concentrate on duties with frequent interruptions; Should have a basically neat and tidy appearance; Watchful to what is going on at all times"

2. GIVEN ORAL/WRITTEN REQUESTS FOR ORDERS/ROUGH DRAFTS OF PURCHASE REQUISITIONS, THE WORKER TYPES PURCHASING DOCUMENTS. (30 task sheets)

ACQUISITION

RECEIVES
oral, written requests for orders, raw materials/rough draft requistions/ rough draft of purchase order/work orders/order forms/purchase requests from salesmen

PROCESS

SORTS
requisitions according to department/order cards numerically
CHECKS
requests/information on requisiton/description by part number/for completeness and detail on orders/vendor's card/company name, address for spelling/ customer card

TYPES
raw materials orders/requisition/purchase orders/checks/on purchase order the date shipment is expected and method of shipment/order form data/ requisition information on purchase order/composed letter ordering materials/agreements for storage/charge forms/letter release for price agreement/purchase request forms
Proofreads, Corrects
all purchase orders/purchasing forms/letters
Obtains
approval signature on letters/purchase orders/requisitions
RECORDS
cost/number of copies in requisition/sending of order on TWX/order number, date typed

DISPOSITION

FILES
order copy/requisition copy
DELIVERS
order copy to Distributing/Shipping/Comptroller/Accounting/results of merchandising request to salesman
MAILS
orders
Places
copy of order on bulletin board

SUPPLEMENTARY STEPS: Sends purchase order using TWX; Duplicates agreement for storage; Stamps order with confirmation/letters with mail meter machine; Attaches requisition and work orders/requests

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Requisitions	Typing
Bulletin Board	Purchase orders	Accuracy
Calculator	Checks	Checking
Stamp	Purchasing forms	Filing
		Letter writing/grammar

REPORTED CRITERIA: "Must type accurately; Close attention to detail; Must be able to read all kinds of handwriting; Care in typing customer name on order since many names are similar except for one initial; Excellent English; Compose letters"

3. GIVEN A LIST OF LATE ORDERS, THE WORKER FOLLOWS UP ON ORDERS. (5 task sheets)

Receives lists of late orders
Checks follow-up file daily
Calls Receiving and vendor representative to trace item
Completes follow-up form
Teletypes follow-up messages to vendor
Records/reports findings
Sends follow-up forms to departments concerned
Files copy of teletype message

PURCHASING CRITICAL INCIDENTS

"A worker typed a purchase order. Instead of ordering 1400 each of a specific rivet, she ordered 1400 lbs. of rivets. This amounted to a difference of six million rivets, and resulted in an excess cost of $60,000 for the company."

"Since the employee came to work ten months ago, she has accurately logged all purchase orders that she received. This is important since what she logged must reconcile with what the buyer said he did. This accuracy has saved much confusion and frustration on the part of all the people who depend upon the information in the log."

"Recently she rapidly and accurately processed an unusually heavy volume of bids for construction jobs, while also efficently handling all incoming telephone calls."

"If the worker has received a requisition from an agent that is not complete, he will call the agent and request the information himself, which is not really part of his duties. Other workers have either sent it on or brought the problem to the attention of the supervisor. The worker really understands his job and is able to change incorrect information or obtain missing information."

"In totaling the price of merchandise the company was ordering, the worker arrived at a total of $8,000 instead of $2,000. The worker left the accumulative total key down when she had finished a previous job. The previous total was added to the figure she was working on."

"Last week a customer invoiced us for the wrong amount, and she caught the price difference. The vendor charged us too much. She compares each price on the invoice with each price on the purchase order."

"Forty custom-made cables had to be scrapped because she entered the wrong code number on the purchase order."

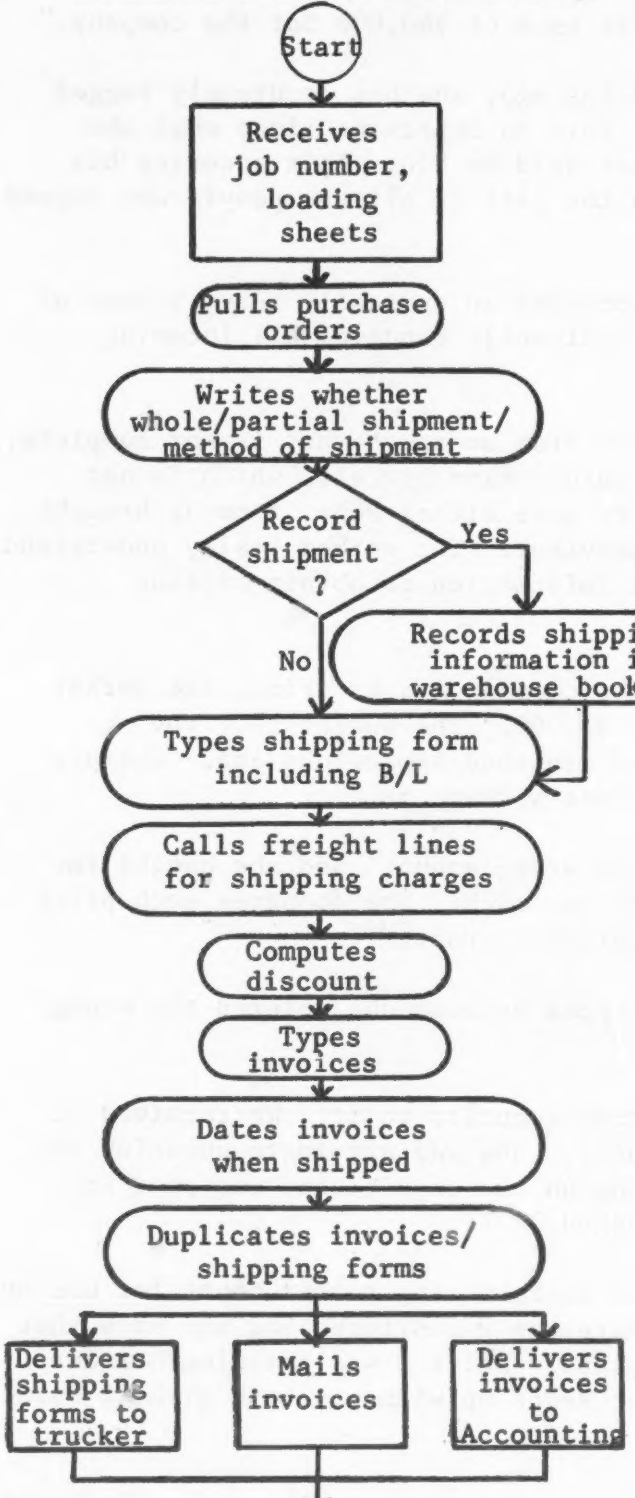
"She typed a purchase order with the wrong quantity on it. We received 31 pounds of rubber bands instead of 3 pounds. She was afraid to question the person who ordered them. The handwriting on the requisition was poor and she took a guess when she should have asked."

"Last month, she did an excellent job of backordering rubber boots for use by the workers on the production line. There was a shortage, and she knew that it would affect the production in the plant. While I was training her for the job, I stressed backordering and she keeps up with the task without being told."

"The Receiving Department called the worker about three months ago. The worker knew it was a cancelled order for 100 rolls of carpet but let it go to the Manufacturing Department. Consequently, the company has not been able to sell the carpet, which is valued from $350 to $450 per roll."

6.1 SHIPPING, RECEIVING, AND INVENTORY--SHIPPING

1. **GIVEN INFORMATION THAT JOBS ARE COMPLETED, THE WORKER PROCESSES SHIPPING, BILLING FORMS. (6 task sheets)**


Start
Receives job number, loading sheets
Pulls purchase orders
Writes whether whole/partial shipment/ method of shipment
Record shipment ?
Yes
No
Records shipping information in warehouse book
Types shipping form including B/L
Calls freight lines for shipping charges
Computes discount
Types invoices
Dates invoices when shipped
Duplicates invoices/ shipping forms
Delivers shipping forms to trucker
Mails invoices
Delivers invoices to Accounting
End

Note: Hardware, Software, and Educational Cues listed below refer to entire area of shipping.

HARDWARE

Machinery shipments
Adding machine (10-key)
Calculator
Telephone
Marking pens

SOFTWARE

Purchase orders
Waybills
Bills of lading
Manifest (driver's delivery route)
Billing forms
Shipments
Packages
Routing manuals

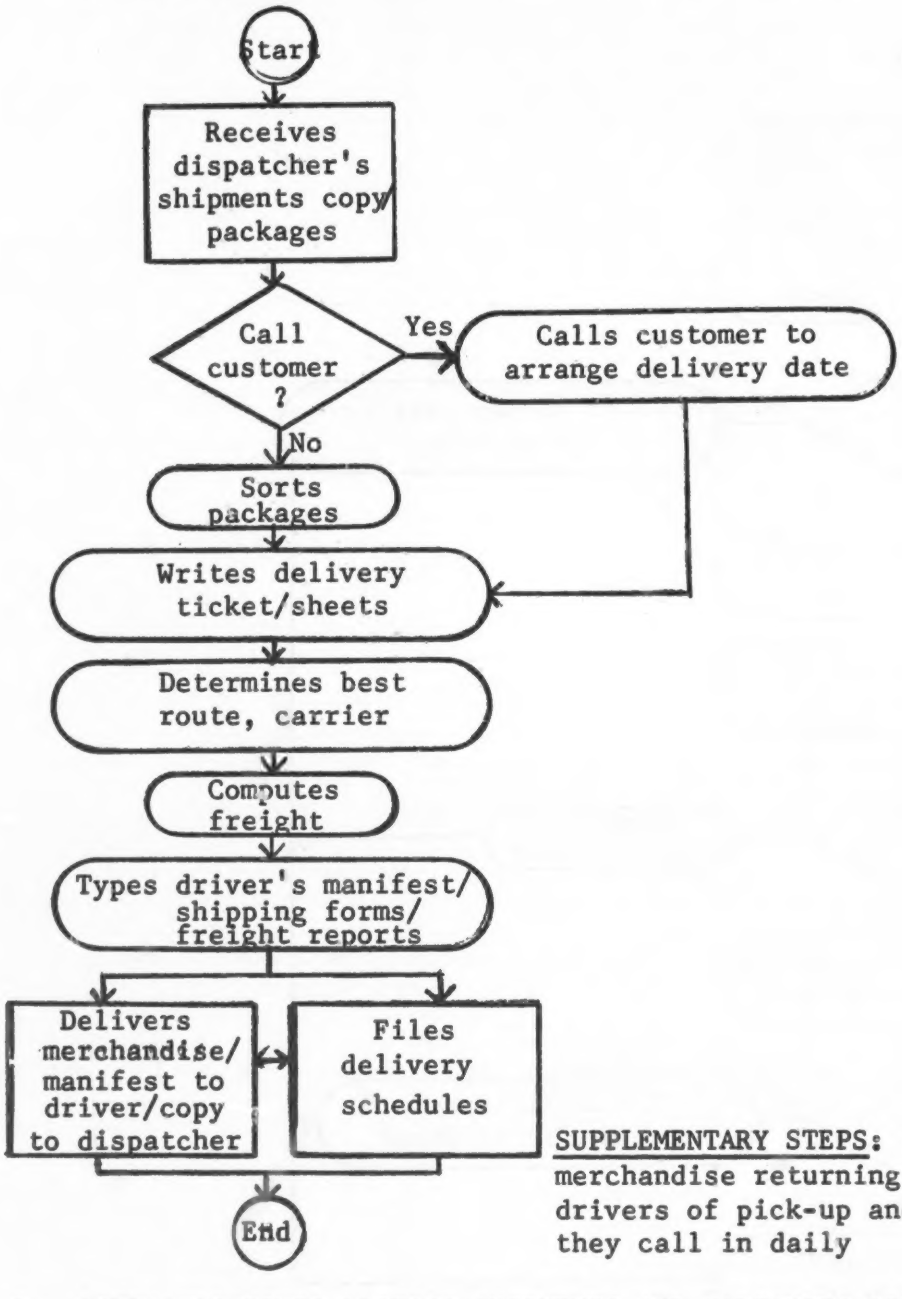
EDUCATIONAL CUES

Statistical typing
Computational skills
Manual dexterity
Telephone manner
Decisions of cost versus speed in routing
Filing (alphabetic, numeric)
Verifying shipments
Checking, tracing shipments
Freight, delivery, and billing procedures

SUPPLEMENTARY STEP: Types new invoice for back orders

REPORTED CRITERIA: "Speed, accuracy, neatness in typing numbers"

2. GIVEN SHIPPING INFORMATION AND MERCHANDISE, THE WORKER ROUTES DELIVERIES. (7 task sheets)


Start
Receives dispatcher's shipments copy/ packages
Call customer ?
Yes
Calls customer to arrange delivery date
No
Sorts packages
Writes delivery ticket/sheets
Determines best route, carrier
Computes freight
Types driver's manifest/ shipping forms/ freight reports
Delivers merchandise/ manifest to driver/copy to dispatcher
Files delivery schedules
End

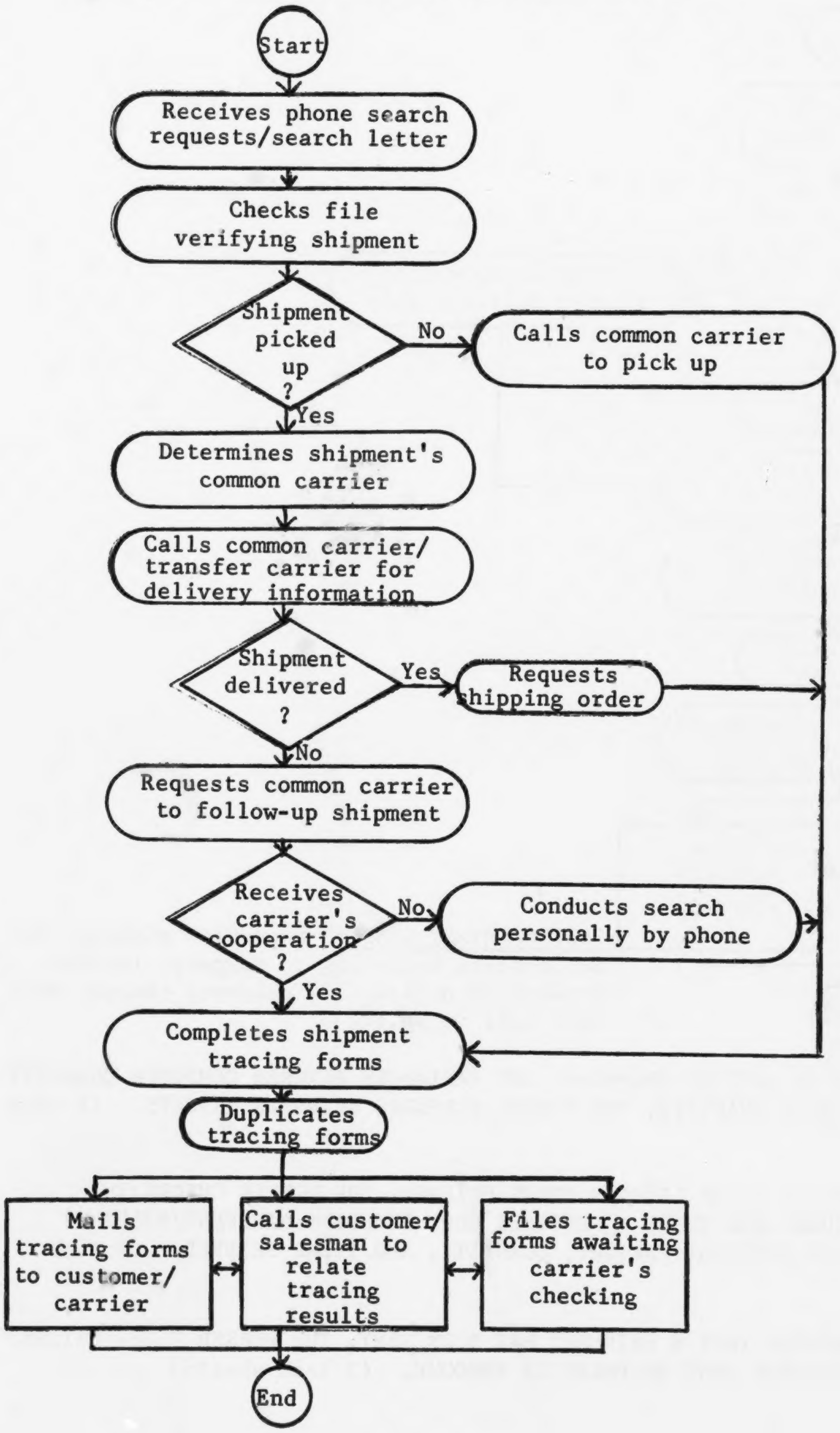
SUPPLEMENTARY STEPS: Schedules pick-ups for merchandise returning to company; Informs drivers of pick-up and delivery changes when they call in daily

3. GIVEN PRINTOUTS LISTING SHIPMENTS AND VARIANCES BETWEEN COMPUTER QUANTITY AND PACKING SLIP QUANTITY, THE WORKER PREPARES SHIPPING REPORTS. (1 task sheet)

4. GIVEN A SHIPPING ORDER LISTING ITEMS SHIPPED, THE WORKER CHECKS THE COMPUTED FIGURES AND TYPES A MULTIPLE COPY SHIPPING MANIFEST/BILLS OF LADING/WAYBILL LISTING: WEIGHT, QUANTITY, AND ITEMS SHIPPED. (9 task sheets)

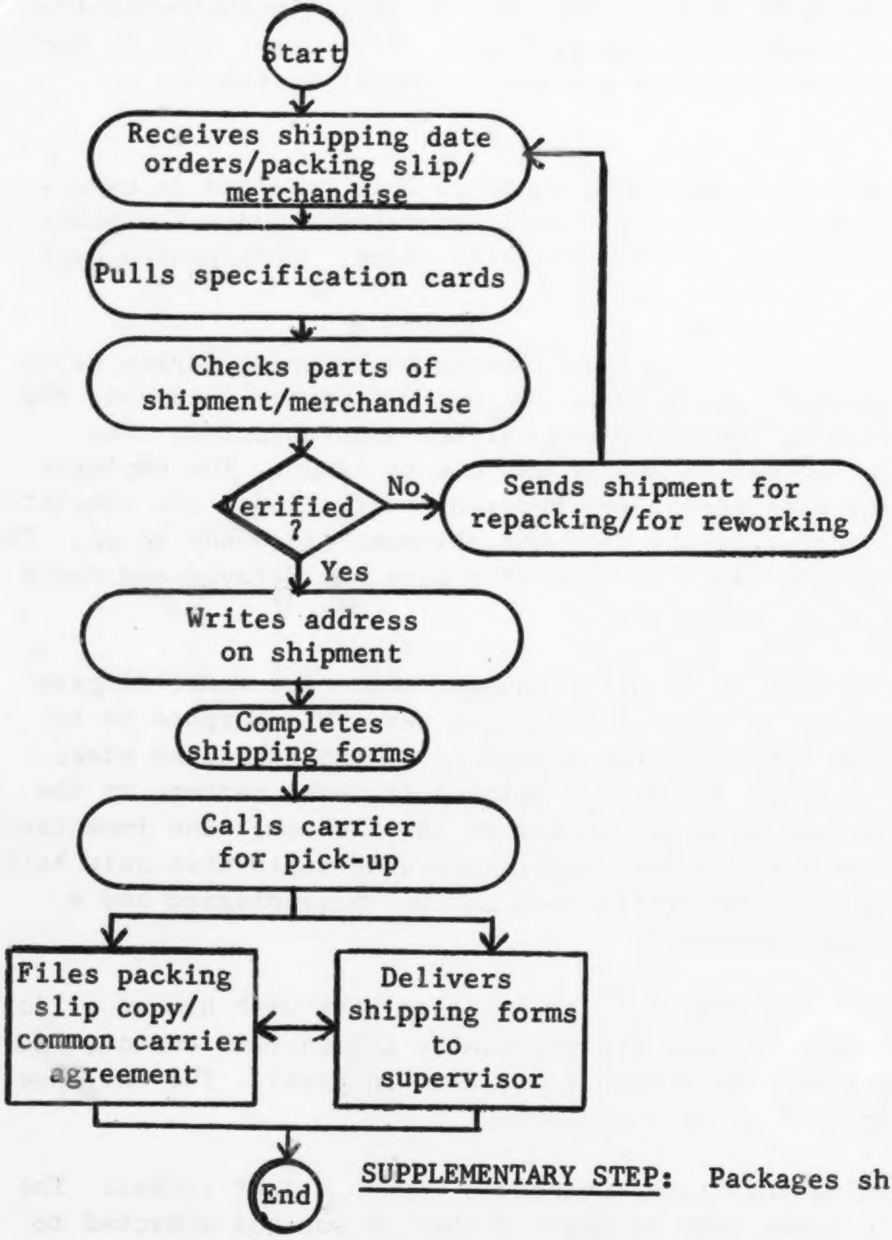
5. GIVEN INFORMATION THAT A SHIPMENT HAS BEEN SENT, THE WORKER TYPES LETTER/ TELETYPES CUSTOMER THAT SHIPMENT IS ENROUTE. (3 task sheets)

6. GIVEN A REQUEST TO FIND WHY A SHIPMENT HAS NOT BEEN DELIVERED, THE WORKER TRACES DELIVERY OF SHIPMENT. (5 task sheets)


Start
Receives phone search requests/search letter
Checks file verifying shipment
Shipment picked up ?
No
Calls common carrier to pick up
Yes
Determines shipment's common carrier
Calls common carrier/ transfer carrier for delivery information
Shipment delivered ?
Yes
Requests shipping order
No
Requests common carrier to follow-up shipment
Receives carrier's cooperation ?
No
Conducts search personally by phone
Yes
Completes shipment tracing forms
Duplicates tracing forms
Mails tracing forms to customer/ carrier
Calls customer/ salesman to relate tracing results
Files tracing forms awaiting carrier's checking
End

4

7. GIVEN AN OUTBOUND SHIPMENT, THE WORKER VERIFIES CONTENTS OF SHIPMENT. (6 task sheets)


Start
Receives shipping date orders/packing slip/ merchandise
Pulls specification cards
Checks parts of shipment/merchandise
Verified ?
No
Sends shipment for repacking/for reworking
Yes
Writes address on shipment
Completes shipping forms
Calls carrier for pick-up
Files packing slip copy/ common carrier agreement
Delivers shipping forms to supervisor
End

SUPPLEMENTARY STEP: Packages shipment

8. GIVEN SHEETS LISTING SHIPMENTS, THE WORKER DISTRIBUTES AND FILES COPIES. (3 task sheets)

9. GIVEN REPAIRED MERCHANDISE, COMPLETED WORK ORDER, AND SHIPPING PAPERS, THE WORKER PACKAGES THE MERCHANDISE AND RECORDS THE SHIPMENT. (3 task sheets)

SHIPPING CRITICAL INCIDENTS

"There had been friction between office employees and factory employees, which resulted in incorrect size boxes being requested for outgoing shipments from the factory. This caused human relations problems. The worker went to the production (factory) department, and in a pleasant manner worked out a solution."

"Carelessly she sent an order to the wrong vendor. This resulted in unnecessary delay while the order was being returned and reprocessed. The books were needed for reference material in a particular class. This caused poor public relations."

"Machines are sometimes exported to Canada. Among the shipping papers it is necessary to include a special export form. On one particular occasion, the carrier had arrived to pick up the equipment earlier than expected. The forms were not ready. The worker in charge was out to lunch. The employee had to drop everything, and with just a few hurried instructions, she completed the forms. These were in order by the time the shipment was ready to go. The carriers were particularly gratified because they were not delayed and could return to their plant before closing time."

"For railroad carload shipments the traffic manager must make a car-diagram to show the exact location of cartons in a freight car. The purpose is to make the cartons accessible for efficient unloading at the scheduled stops. While typing the bill of lading, the worker noticed that the cartons on the car-diagram did not correspond with the number on the invoice. She immediately called it to her supervisor's attention, and it was discovered that only half the order had been diagramed. The traffic manager was very pleased and a great deal of extra work was avoided."

"One of the merchandisers requested that the employee work with him on a list of "ship later's." The employee very diplomatically called each customer for the merchandiser and explained the reason for a late shipment. The employee's effectiveness resulted in no loss of customers."

"Another employee performing this task managed to lose a weight ticket. The truck driver was ready to leave when he noticed that it was not attached to the bill of lading, so he had to wait while another one was prepared. This employee lacked the necessary follow through to check himself to see that all steps had been completed to finish a task."

"She and another girl now handle what it took seven girls to handle before. There are about 50 "look ups" a day, in addition to filing. These "look ups" are time consuming. She always gets them to the individuals requesting the information the same day. ("look ups" are requests for materials-shipping tickets and customer invoices that have been filed and are now wanted by someone in the building) This one day she did 50 "look ups" in addition to her daily filing. The other girls didn't have time to do any of them. She took it upon herself to get them all done. She knew the people wanted them that same day, and she finished them."

6.2 SHIPPING, RECEIVING, AND INVENTORY--RECEIVING

1. GIVEN RECEIVING DOCUMENTS AND/OR INCOMING SHIPMENTS, THE WORKER CHECKS AND RECORDS INBOUND SHIPMENTS. (9 task sheets)

HARDWARE

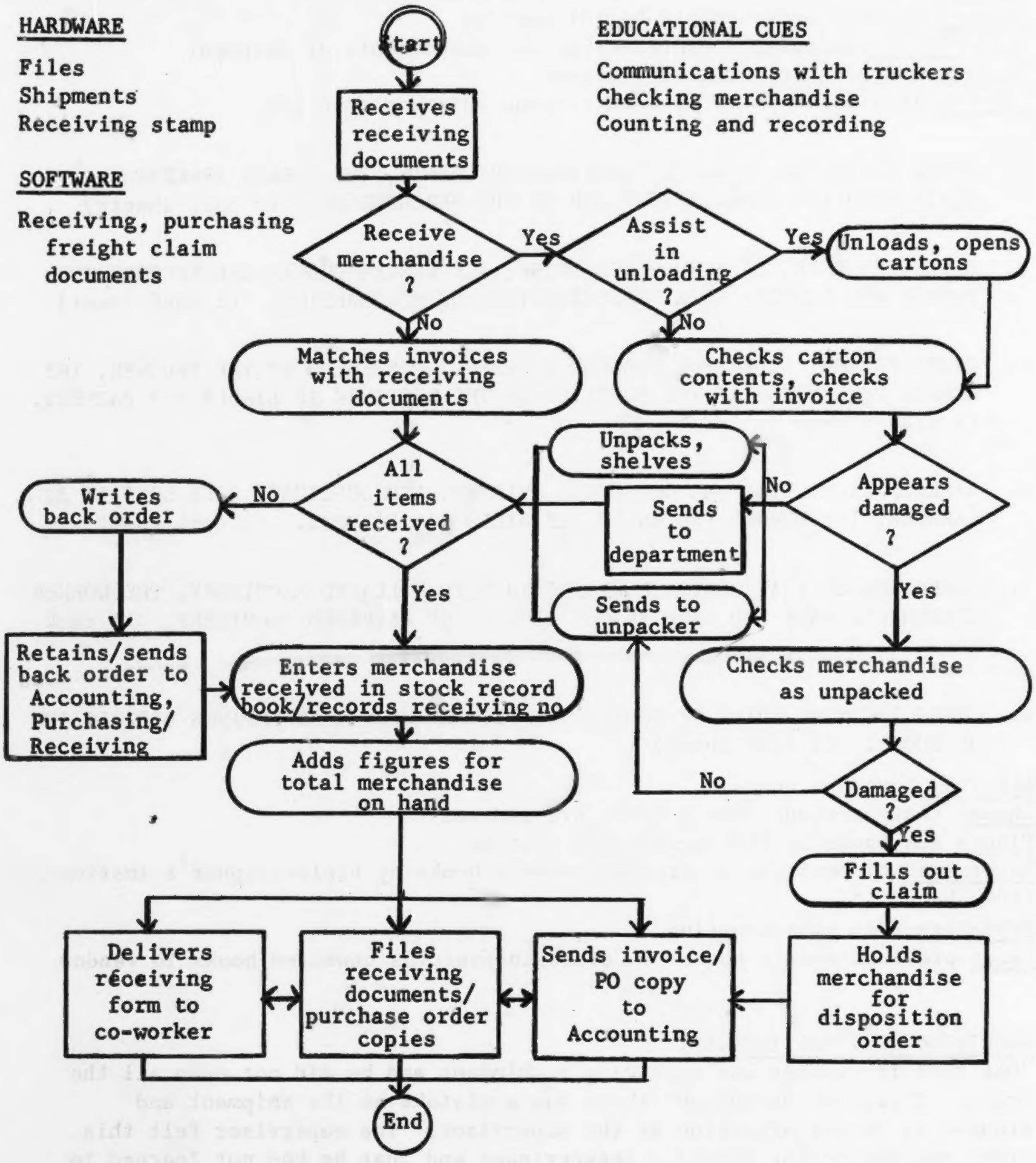
Files
Shipments
Receiving stamp

SOFTWARE

Receiving, purchasing freight claim documents

EDUCATIONAL CUES

Communications with truckers
Checking merchandise
Counting and recording


Start
Receives receiving documents
Receive merchandise ?
Yes
No
Assist in unloading ?
Yes
No
Unloads, opens cartons
Matches invoices with receiving documents
Checks carton contents, checks with invoice
All items received ?
No
Yes
Writes back order
Unpacks, shelves
Sends to department
Sends to unpacker
No
Appears damaged ?
Yes
Retains/sends back order to Accounting, Purchasing/ Receiving
Enters merchandise received in stock record book/records receiving no
Adds figures for total merchandise on hand
Checks merchandise as unpacked
No
Damaged ?
Yes
Fills out claim
Delivers receiving form to co-worker
Files receiving documents/ purchase order copies
Sends invoice/ PO copy to Accounting
Holds merchandise for disposition order
End

SUPPLEMENTARY STEPS: Calls warehourse regarding missing information on receiving forms; Reduced price shipments are recorded in colored pencil; Stamps receiving documents "partial" if only portion of shipment received; Delivers receiving forms to supervisor if price adjustment noted on forms

REPORTED CRITERIA: "Shipments received accurately recorded in case of disagreement with sending company; Needs manual dexterity; Skillful at counting material; Quick handling of damaged materials (chemicals); Organizes own work schedules"

2. GIVEN A REQUEST TO TRACE A SHIPMENT, THE WORKER EXPEDITES INBOUND SHIPMENTS. (4 task sheets)

Receives request to check on incoming shipment or
Determines when order should be followed up
Calls/writes shipping source/carrier for whereabouts of shipment
Records shipping information received
Informs interested party of when inbound shipment expected

3. GIVEN PURCHASED, DAMAGED/SHORT/OVERSHIPMENTS, THE WORKER PROCESSES A CLAIM WITH THE CARRIER/SUPPLIER OF THE MERCHANDISE. (3 task sheets)

4. GIVEN RETURNED, DAMAGED MERCHANDISE, THE WORKER CHECKS AND RECORDS THE DAMAGE AND DIRECTS REPAIRS/DESTRUCTION OF MERCHANDISE. (1 task sheet)

5. GIVEN FREIGHT BILLS FOR INBOUND SHIPMENTS PRESENTED BY THE TRUCKER, THE WORKER DETERMINES IF THE SUPPLIER OR THE RECEIVER IS LIABLE FOR PAYMENT. (1 task sheet)

6. GIVEN FREIGHT BILLS ACCOMPANYING SHIPMENT AND DUPLICATE BILL SENT IN BY CARRIER, THE WORKER PROCESSES THE BILLS FOR PAYMENT. (1 task sheet)

7. GIVEN NOTICE THAT CUSTOMER WISHES TO RETURN LEASED MACHINERY, THE WORKER DETERMINES DATE AND CARRIER FOR PICK-UP OF RETURNED MACHINERY. (1 task sheet)

8. GIVEN INCOMING BOXES OF BOOKS, THE LIBRARY WORKER DETERMINES DISPOSITION OF BOOKS. (1 task sheet)

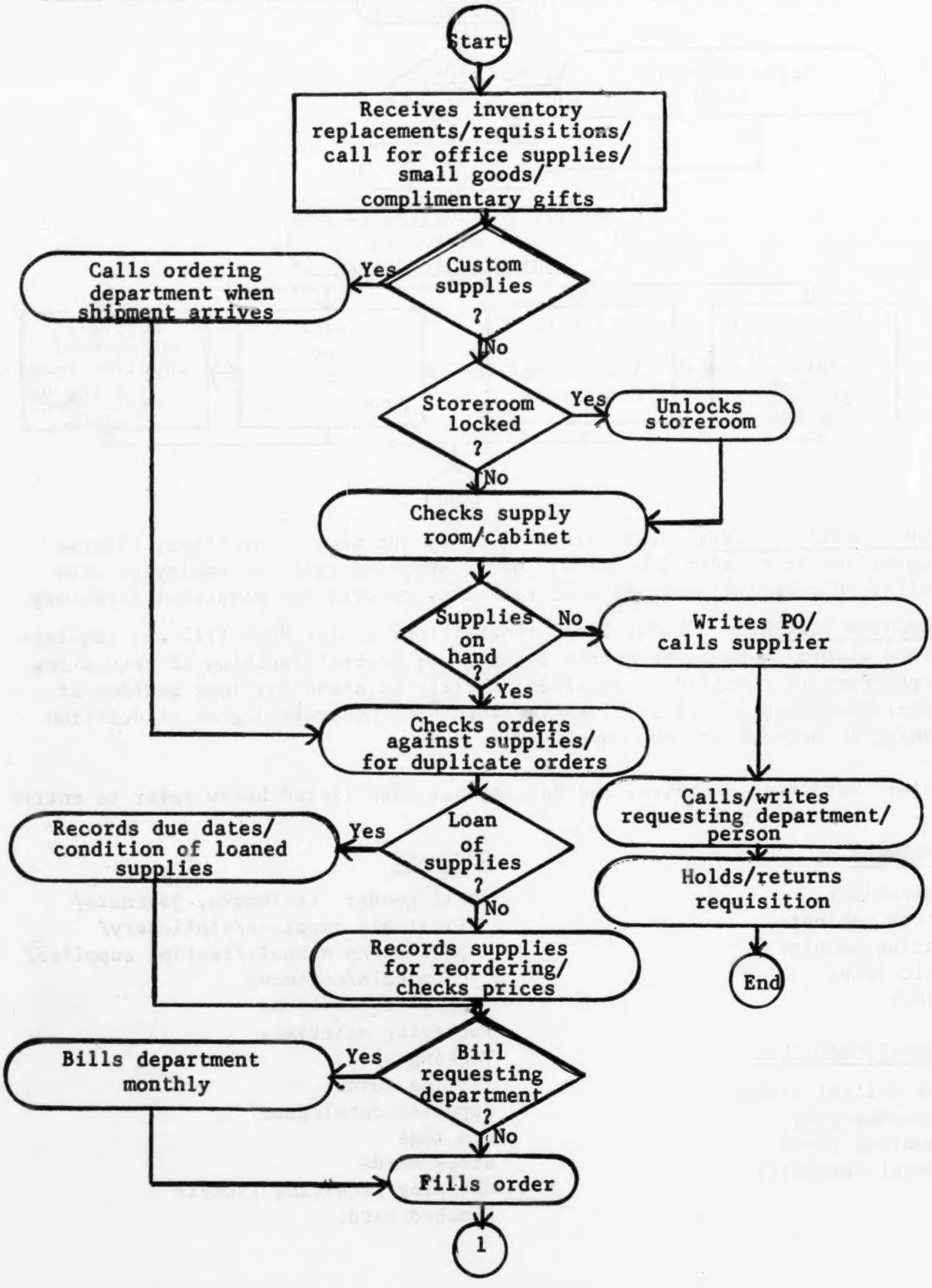
Receives boxes of books
Checks that previous week's books are removed
Places new books in bibliographer's section
Determines disposition of previous week's books by bibliographer's instruction sheet
Sends invoices to Accounting
Sends previous week's books to Cataloging/returns unwanted books to vendor

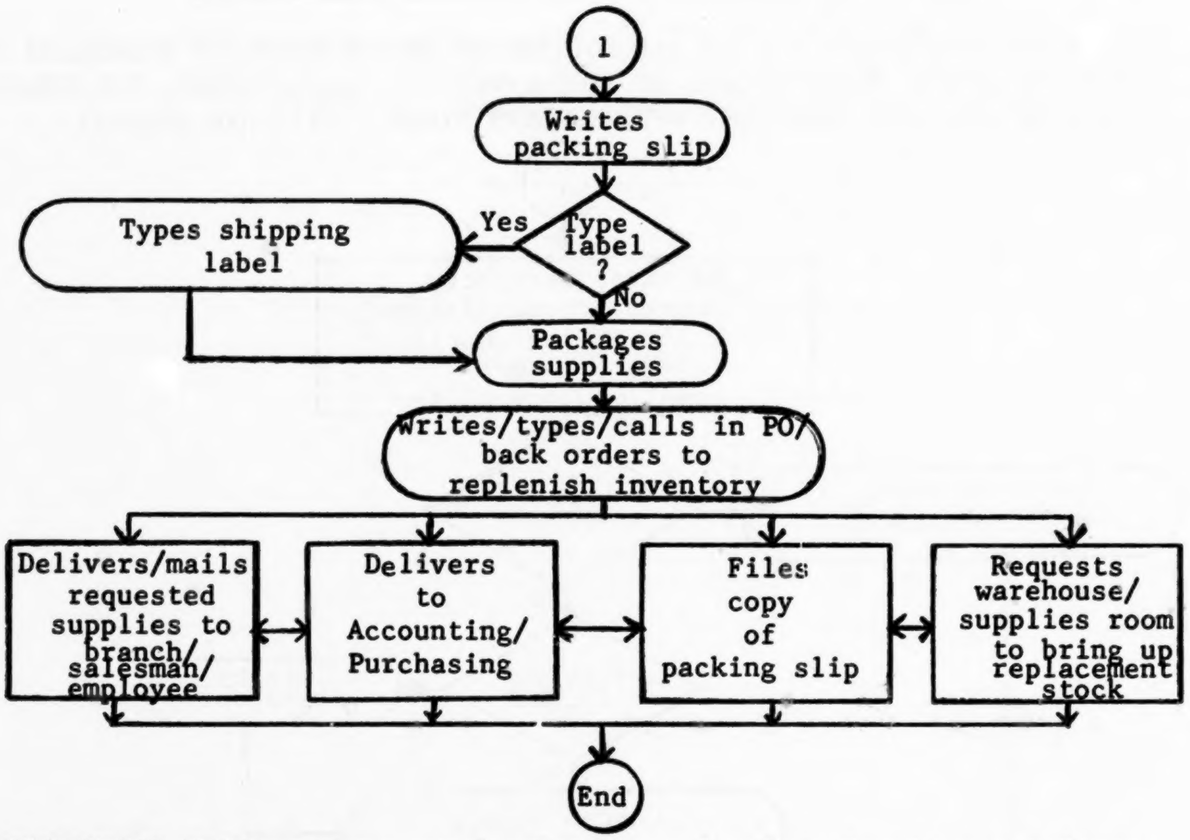
RECEIVING CRITICAL INCIDENT

"One time the worker was receiving a shipment and he did not open all the boxes. Therefore he thought there was a mistake on the shipment and brought it to the attention of the supervisor. The supervisor felt this error was due to the worker's inexperience and that he had not learned to check completely."

6.3 SHIPPING, RECEIVING, AND INVENTORY--INVENTORY

1. GIVEN THE RESPONSIBILITY OF MAINTAINING AN OFFICE SUPPLIES STOREROOM AND INCOMING STOCK, SMALL GOODS, AND PHONE/WRITTEN REQUISITIONS, THE WORKER FILLS ORDERS FROM INVENTORY AND REORDERS STOCK. (22 task sheets)


Start
Receives inventory replacements/requisitions/ call for office supplies/ small goods/ complimentary gifts
Custom supplies ?
Yes
Calls ordering department when shipment arrives
No
Storeroom locked ?
Yes
Unlocks storeroom
No
Checks supply room/cabinet
Supplies on hand ?
No
Writes PO/ calls supplier
Yes
Checks orders against supplies/ for duplicate orders
Calls/writes requesting department/ person
Holds/returns requisition
End
Loan of supplies ?
Yes
Records due dates/ condition of loaned supplies
No
Records supplies for reordering/ checks prices
Bill requesting department ?
Yes
Bills department monthly
No
Fills order
1


1
Writes packing slip
Type label ?
Yes
Types shipping label
No
Packages supplies
Writes/types/calls in PO/ back orders to replenish inventory
Delivers/mails requested supplies to branch/ salesman/ employee
Delivers to Accounting/ Purchasing
Files copy of packing slip
Requests warehouse/ supplies room to bring up replacement stock
End

SUPPLEMENTARY STEPS: Scans stock visually and orders low items; Informs supervisor to reorder low items; Checks supplies taken by employees with self-service privileges; Records each item removed for perpetual inventory

REPORTED CRITERIA: "Fills 25-30 requisitions daily; Must fill all requisitions within 24 hours or notify department; Correct decision if requesting department is entitled to supplies; Ability to stand for long periods of time; Knowledge of all supplies in stockroom; Moderate degree of decision making in determining new supplies"

Note: Hardware, Software, and Educational Cues listed below refer to entire area of inventory.

HARDWARE

Typewriter
Stock cabinets
Adding machine
Calculator
Truck

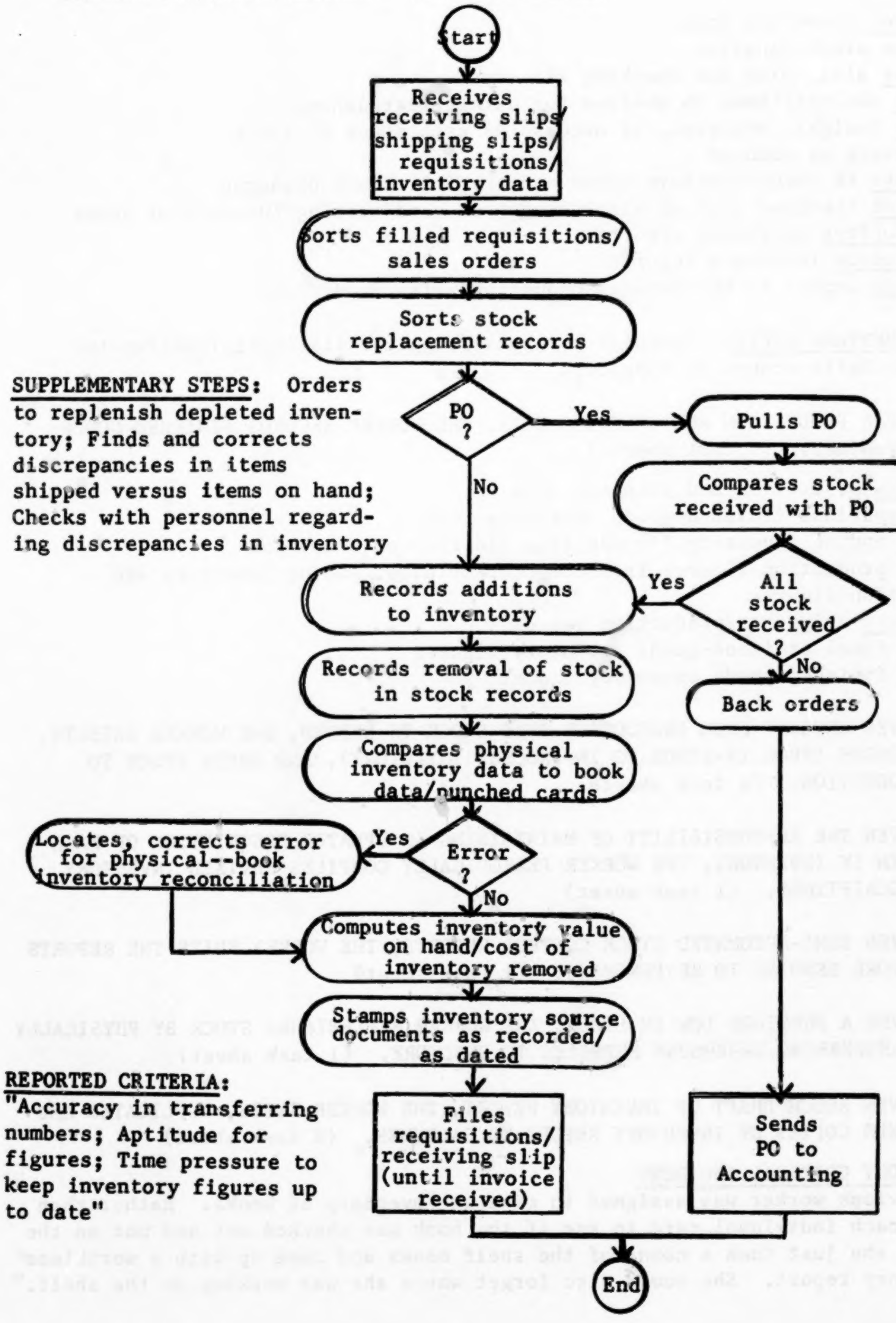
EDUCATIONAL CUES

Statistical typing
Recordkeeping
Counting stock
Manual dexterity

SOFTWARE

Small goods: textbooks, journals/ first aid supplies/stationery/ procedures manuals/testing supplies/ chemicals/costumes
Supply requisitions
Packaging materials
Packing slips
Billing forms
Supplies catalogues
Bin tags
Stock cards
Shipping/receiving tickets
Punched cards

2. GIVEN OFFICE SUPPLIES DOCUMENTS AND COMPANY SALES LISTINGS, THE WORKER UPDATES INVENTORY RECORDS. (22 task sheets)


Start
Receives receiving slips/ shipping slips/ requisitions/ inventory data
Sorts filled requisitions/ sales orders
Sorts stock replacement records
PO ?
Yes
Pulls PO
Compares stock received with PO
No
Records additions to inventory
Yes
All stock received ?
No
Back orders
Records removal of stock in stock records
Compares physical inventory data to book data/punched cards
Locates, corrects error for physical--book inventory reconciliation
Yes
Error ?
No
Computes inventory value on hand/cost of inventory removed
Stamps inventory source documents as recorded/ as dated
Files requisitions/ receiving slip (until invoice received)
Sends PO to Accounting
End

SUPPLEMENTARY STEPS: Orders to replenish depleted inventory; Finds and corrects discrepancies in items shipped versus items on hand; Checks with personnel regarding discrepancies in inventory

REPORTED CRITERIA:
"Accuracy in transferring numbers; Aptitude for figures; Time pressure to keep inventory figures up to date"

3. GIVEN AN INVENTORY FORM, THE WORKER TAKES A PHYSICAL INVENTORY. (6 task sheets)

Receives inventory form
Goes to stock location
Follows aisle plan for checking all stock
Checks shelves/items on shelves for damage/wear/dating
Counts (weighs, measures, if necessary) each piece of stock
Tags stock as counted
Recounts if inventory-form count and physical count disagree
Compiles itemized list of stock needed/on hand/missing/location of items
Types/writes inventory reports
Photocopies inventory reports
Delivers report to Purchasing/Accounting/Sales/Production

SUPPLEMENTARY STEPS: Consults warehouse/supplier listings; Types/writes orders; Mails orders to suppliers

4. GIVEN PRODUCTION AND SHIPPING DATA, THE WORKER RECORDS FINISHED-GOODS INVENTORY. (7 task sheets)

Receives production and shipping data
Pulls previous finished-goods inventory form
Writes ending inventory figures from old form onto new form
Totals production figures from computer printout/ending inventory and production figures
Subtracts shipments/production losses
Checks final finished-goods inventory figures
Routes finished-goods inventory report

5. GIVEN REQUEST FROM PRODUCTION THAT STOCK IS NEEDED, THE WORKER SELECTS, RECORDS (FROM IN-STOCK TO IN-PROCESS INVENTORY), AND SENDS STOCK TO PRODUCTION. (4 task sheets)

6. GIVEN THE RESPONSIBILITY OF MAINTAINING AN UPDATED DESCRIPTION OF EACH ITEM IN INVENTORY, THE WORKER PERIODICALLY COMPILES REVISED INVENTORY DESCRIPTIONS. (1 task sheet)

7. GIVEN SEMI-AUTOMATED STOCK CONTROL REPORTS, THE WORKER EDITS THE REPORTS BEFORE SENDING TO KEYPUNCHING. (1 task sheet)

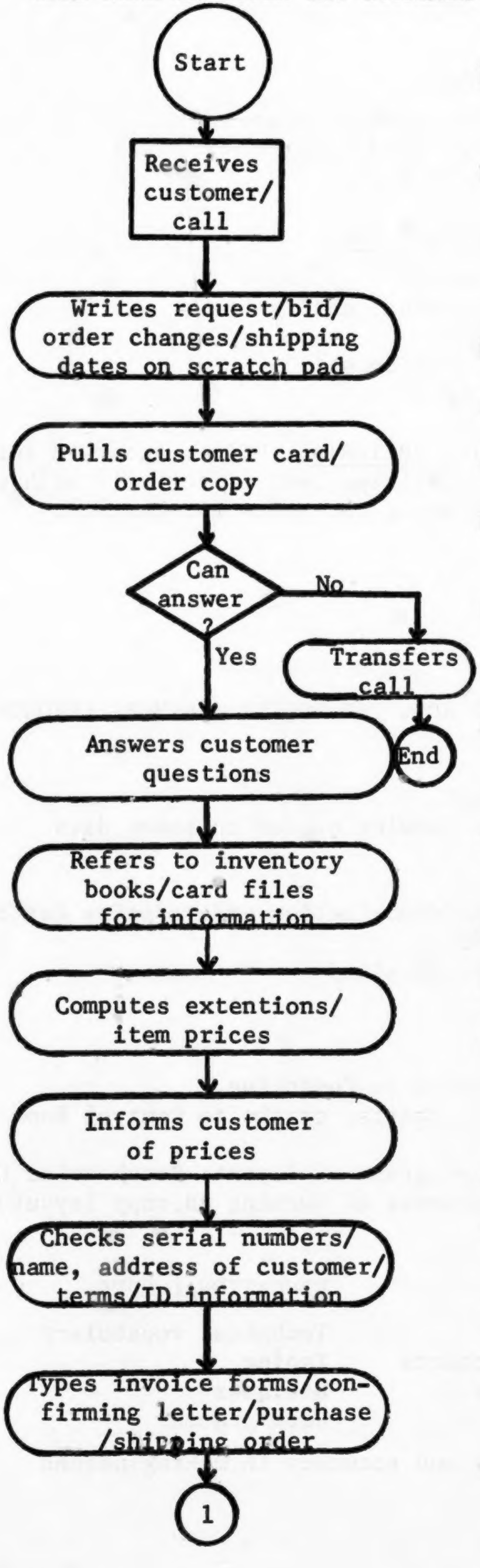
8. GIVEN A SUBSTORE LOW IN STOCK, THE WORKER REPLENISHES STOCK BY PHYSICALLY TRANSFERRING WAREHOUSE SUPPLIES TO SUBSTORE. (1 task sheet)

9. GIVEN ROUGH DRAFT OF INVENTORY REPORT, THE WORKER TYPES, DUPLICATES AND SENDS COPIES OF INVENTORY REPORT TO SALESMEN. (1 task sheet)

INVENTORY CRITICAL INCIDENT
"A previous worker was assigned to make an inventory of books. Rather than check each individual card to see if the book was checked out and not on the shelf, she just took a count of the shelf books and came up with a worthless inventory report. She would also forget where she was working on the shelf."

7. SALES

1. GIVEN CUSTOMER CALL OR IN PERSON, THE WORKER HANDLES REQUESTS OVER THE TELEPHONE AND OVER THE COUNTER. (25 task sheets)


Start
Receives customer/ call
Writes request/bid/ order changes/shipping dates on scratch pad
Pulls customer card/ order copy
Can answer ?
No
Yes
Transfers call
End
Answers customer questions
Refers to inventory books/card files for information
Computes extentions/ item prices
Informs customer of prices
Checks serial numbers/ name, address of customer/ terms/ID information
Types invoice forms/confirming letter/purchase /shipping order
1

ACQUISITION

RECEIVES
  customer/telephone call

PROCESS

Writes
  request to increase order/all necessary information on scratch pad/request for ID card/credit rating on card/order changes/shipping dates/bid offer on house

Pulls
  customer card/order copy

Answers
  customer questions

Transfers
  call to Public Relations director

Refers
  to inventory books for items ordered/ card file for descriptive information

COMPUTES
  extensions on prices/item prices

INFORMS
  customer of prices

CHECKS
  serial, model numbers/name, address of customer/cash, credit terms/customer ID information

TYPES
  invoice forms, numbers/purchase order/ confirming letter/shipping order

Stamps
  order form with customer address plate

Locates
  ordered parts

RECORDS
  sort-code numbers of parts on invoice/ order in log/sending of new ID card

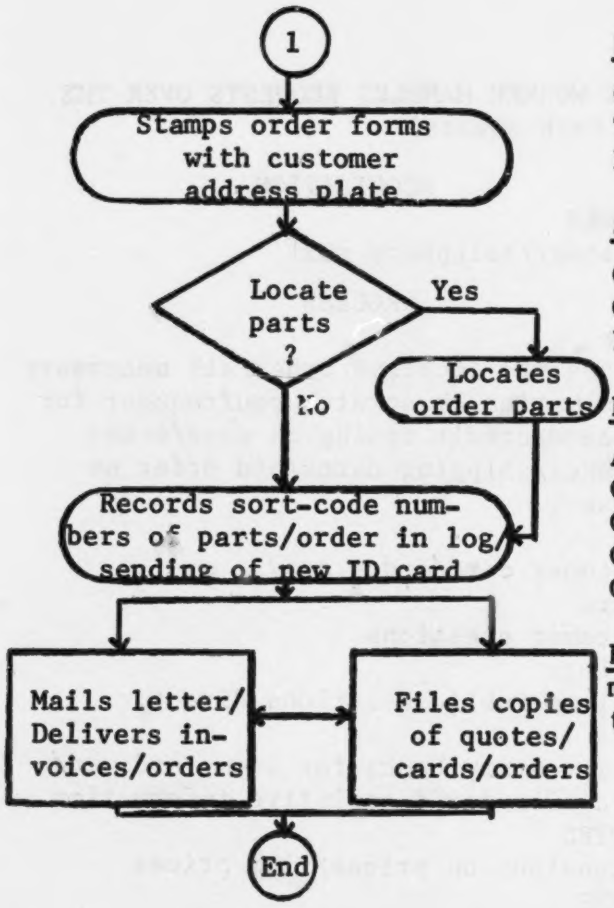
DISPOSITION

MAILS
  confirmation letter/ID card to customer

FILES
  copy of quote/customer card/copy of shipping order/credit card

DELIVERS
  invoice to Accounting/purchase order to salesman/copy of shipping order to customer/sales orders to Shipping

SUPPLEMENTARY STEP: Arranges appointment to see house with customer and salesman.


1
Stamps order forms with customer address plate
Locate parts ?
Yes
Locates order parts
No
Records sort-code numbers of parts/order in log/sending of new ID card
Mails letter/ Delivers invoices/orders
Files copies of quotes/ cards/orders
End

HARDWARE

Calculator
Telephone
Files

SOFTWARE

Customer address plate
Customer card/order
Inventory books

EDUCATIONAL CUES

Accuracy
Computational skills
Courtesy
Communication skills
Checking

REPORTED CRITERIA: "Gives accurate information rapidly; Deal effectively with customers being courteous and tactful."

2. GIVEN CUSTOMER REQUESTS AND CLASSIFIED ADS, THE WORKER ARRANGES LAYOUTS AND DISPLAY FOR ADS. (14 task sheets)

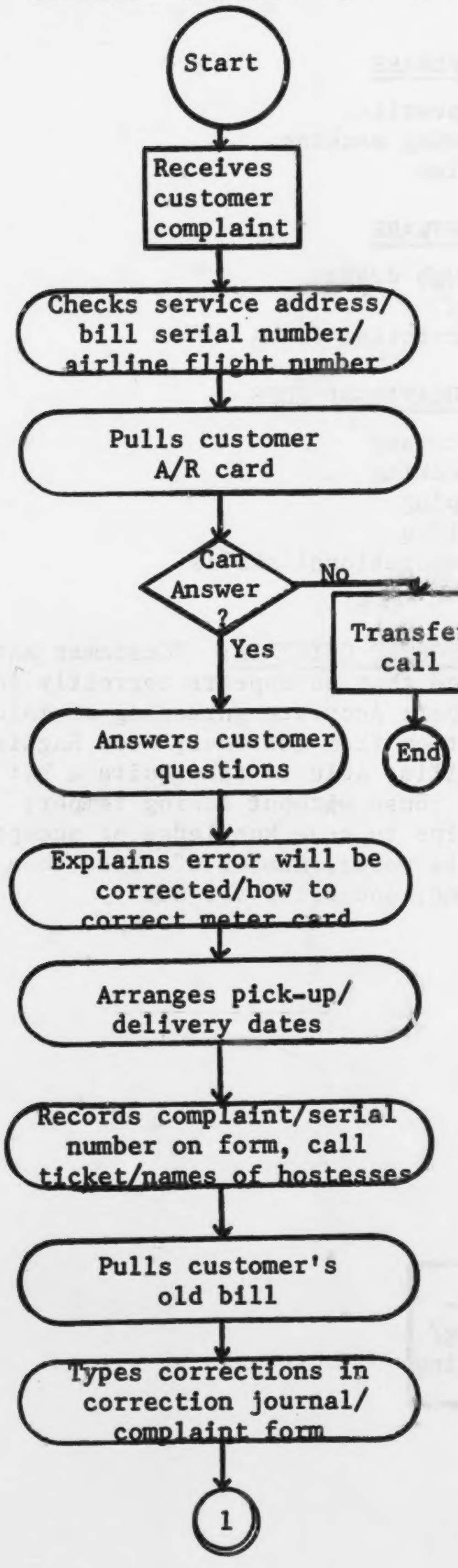
Receives classified ads/cancellation request
Devises eye catching display/graphs, carts showing needed customer data
Draws sketch of art work
Arranges ads on paste-up sheet/display
Types paste ups on glossy paper/offset mats/cancellation orders/sales letters
Proofreads all typewritten material and ads
Obtains corrections on layout/orders to be cancelled
Cuts ads from paper
Pastes on cancellation order
Corrects proofs
Delivers paste up and sales letter with sketch to Composing
Sends proof to customer/cancellation order, charts, graphs to Control Room

SUPPLEMENTARY STEPS: Informs customer on progress of layout; Reschedules to speed up progress if necessary; Observes process of turning ad copy layouts into finished display ads"

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Ads	Technical vocabulary
	Graphs and charts	Typing
	Glossy paper	Neatness
	Offset mats	Good grammar

REPORTED CRITERIA: "Concentration on copy and accuracy in making needed corrections a must; Deadlines to be met."

3. GIVEN CUSTOMER COMPLAINTS, THE WORKER ANSWERS QUESTIONS AND SOLVES CUSTOMER PROBLEMS. (13 task sheets)


Start
Receives customer complaint
Checks service address/ bill serial number/ airline flight number
Pulls customer A/R card
Can Answer ?
No
Transfer call
End
Yes
Answers customer questions
Explains error will be corrected/how to correct meter card
Arranges pick-up/ delivery dates
Records complaint/serial number on form, call ticket/names of hostesses
Pulls customer's old bill
Types corrections in correction journal/ complaint form
1

HARDWARE

Telephone
Files
Typewriter

SOFTWARE

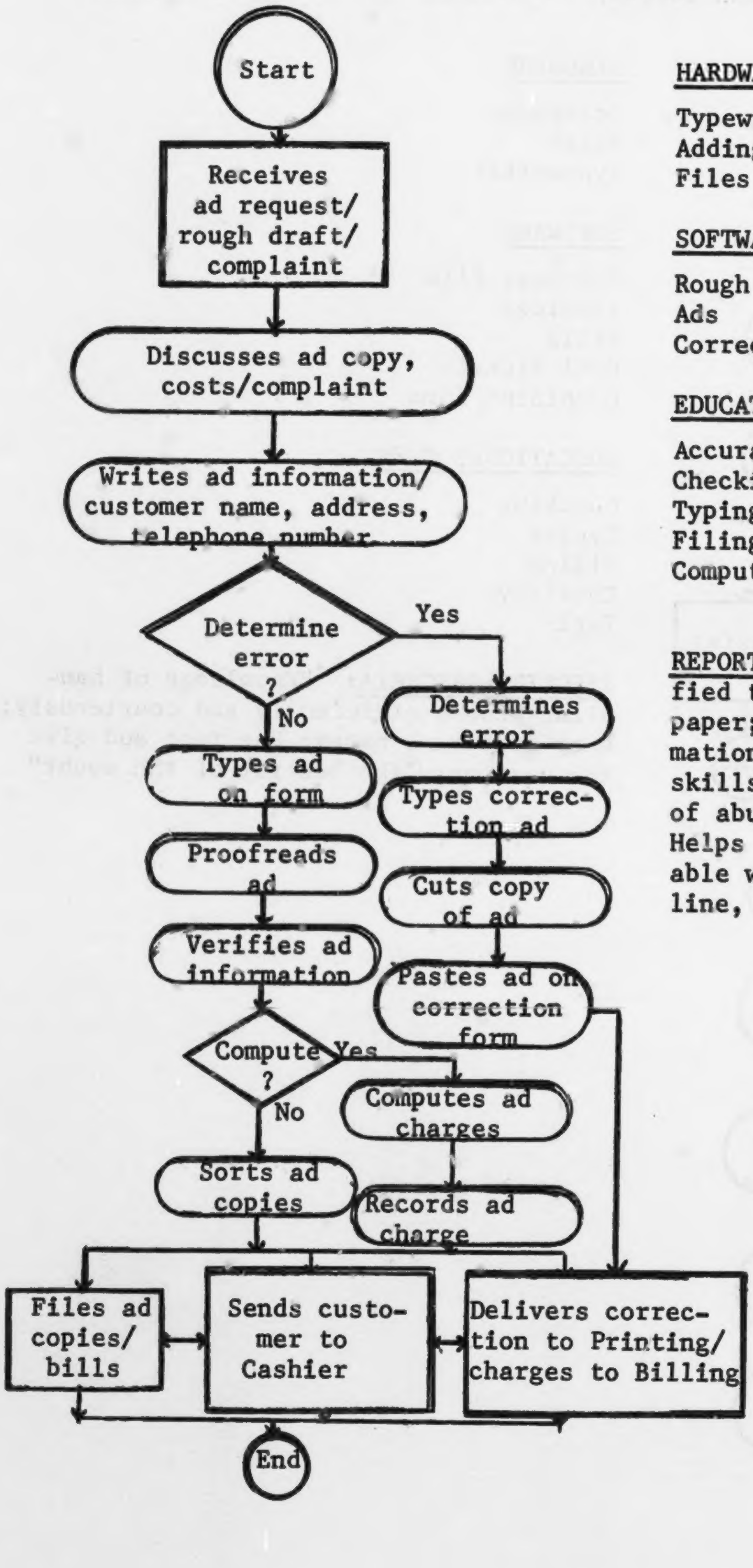
Customer file
Invoices
Bills
Call tickets
Complaint form

EDUCATIONAL CUES

Checking
Typing
Filing
Courtesy
Tact

REPORTED CRITERIA: "Knowledge of handling people efficiently and courteously; Keep customers happy; Use tact and give the customers the benefit of the doubt"

4. GIVEN CUSTOMER REQUESTS, ROUGH DRAFTS, OR COMPLAINTS, THE WORKER HANDLES CLASSIFIED ADS AND AD COMPLAINTS FOR CUSTOMERS. (12 task sheets)


Start
Receives ad request/ rough draft/ complaint
Discusses ad copy, costs/complaint
Writes ad information/ customer name, address, telephone number
Determine error ?
Yes
No
Determines error
Types ad on form
Types correction ad
Proofreads ad
Cuts copy of ad
Verifies ad information
Pastes ad on correction form
Compute ?
Yes
No
Computes ad charges
Sorts ad copies
Records ad charge
Files ad copies/ bills
Sends customer to Cashier
Delivers correction to Printing/ charges to Billing
End

HARDWARE

Typewriter
Adding machine
Files

SOFTWARE

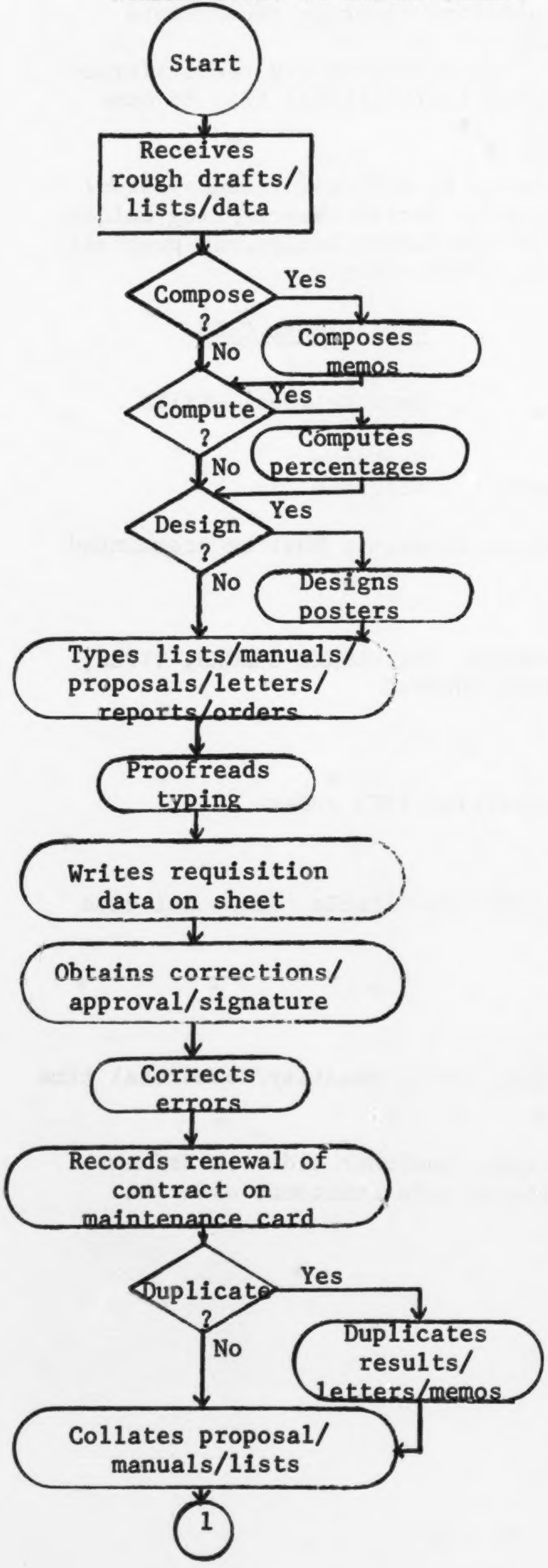
Rough drafts
Ads
Correction forms

EDUCATIONAL CUES

Accuracy
Checking
Typing
Filing
Computational skills

REPORTED CRITERIA: "Customer satisfied that ad appears correctly in paper; Accurate gathering of information from customer; Good English skills; Able to take quite a bit of abuse without losing temper; Helps to have knowledge of acceptable words, number of words to a line, and costs for ads"

5. GIVEN ROUGH DRAFTS, PROPOSALS, LISTS, AND OTHER SOURCE DOCUMENTS, THE WORKER TYPES OR WRITES ITEMS. (19 task sheets)


Start
Receives rough drafts/ lists/data
Compose ?
Yes
No
Composes memos
Compute ?
Yes
No
Computes percentages
Design ?
Yes
No
Designs posters
Types lists/manuals/ proposals/letters/ reports/orders
Proofreads typing
Writes requisition data on sheet
Obtains corrections/ approval/signature
Corrects errors
Records renewal of contract on maintenance card
Duplicate ?
Yes
No
Duplicates results/ letters/memos
Collates proposal/ manuals/lists
1

ACQUISITION

RECEIVES
rough drafts of rate manuals, bid proposals, public relations survey results/ weekly bulletins/salesmen's reports/list of sold commercials/requisition data sheet/lists of orders/purchase orders or typed forms on prospective subscribers/ list of subcontractors/ledger sheets/ customer contracts/bids and specifications

PROCESS

COMPOSES
memos from information received

COMPUTES
percentages for survey results

Designs
posters

TYPES
list of available commercial time/mail labels/order lists/prospective lists of customers/card form on bid details/ rate manuals/bid proposals/cover letters/ memos/stencil of price bulletins/salesmen's reports/edit cards with time, address, limit of customer credit/charge tickets/renewal contracts

Proofreads
typewritten materials

Writes
requisition data sheet

Obtains
correction, approval from dictator/ signature of customer on renewal contract

Corrects
errors

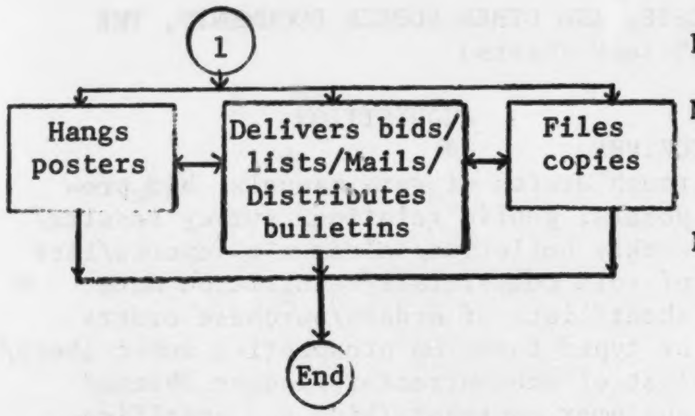
RECORDS
renewal of contract on maintenance card

DUPLICATES
survey results/cover letters/memos/ price bulletins

Collates
duplicated and typewritten reports or price bulletins

DISPOSITION

DELIVERS
bids and specifications to engineers/ rate manuals to dictator/prospect lists to supervisor/copy of renewal of contract to customer



Distributes
bulletins to other departments
MAILS
bid proposals/survey results/price bulletins/available list of commercials
FILES
charge tickets/maintenance cards/copy of survey report/price bulletin copy/cover letter/bid proposal copy/edit cards

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Orders	Typing
Duplicator	Lists/bulletins	Computational skills
Calculator	Contracts	Filing
Files	Bids	Neatness
	Maintenance, edit cards	Accuracy

REPORTED CRITERIA: "Typing must be 100 percent accurate; Must be acquainted with bid terminology"

6. GIVEN INCOMING MAIL, NEW ORDERS, AND CHANGES, THE WORKER CHECKS, TYPES, AND DISTRIBUTES CUSTOMER ORDERS. (10 task sheets)

ACQUISITION

RECEIVES
new order, order changes/printout of commercial (TV) orders

PROCESS

CHECKS
order for accuracy/total of individual orders/available commercial time
SORTS
orders and changes/printout orders
COMPUTES
extensions, weights
RECORDS
items ordered, order number, shipping date, cost, quantity/commercial time sold
TYPES
order number, customer name on record cards, customer order cards/memo listing orders, dates/file cards on customer order/customer order on form letter/order acknowledgement
Proofreads
typewritten materials
DUPLICATES
orders/changes
COMPILES
customer file
Inserts
copy of product order in customer file

DISPOSITION

MAILS
memo to main office/copy of acknowledgement to customer
DELIVERS
file to another department/copies of acknowledgement to foreman, supervisor
Distributes
orders to manager, supervisor, lab department, traffic manager/copies of production order to six other departments
FILES
new orders/order cards/copy of acknowledgement/printout orders

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Price and weight book	Accuracy
Duplicator	Orders	Typing
Files	Printouts	Filing
Calculator		Computational skills

REPORTED CRITERIA: "Must accurately record items; Must know code words, technical vocabulary"

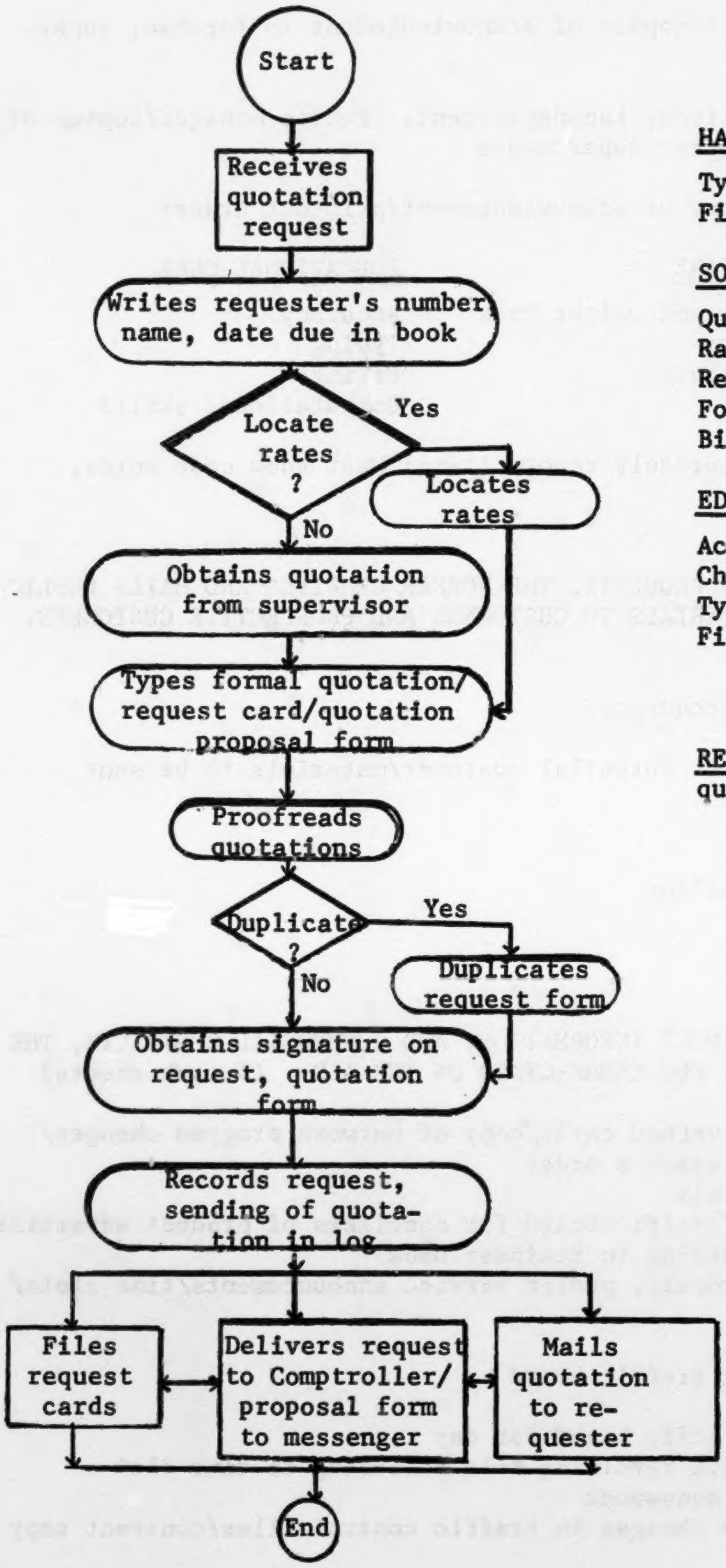
7. GIVEN PRODUCT INFORMATION REQUESTS, THE WORKER COMPILES AND MAILS PUBLIC RELATIONS ADVERTISING MATERIALS TO CUSTOMERS AND PROSPECTIVE CUSTOMERS. (4 task sheets)

Receives product information requests
Checks orders
Records index card with data of potential customer/materials to be sent
Compiles requested literature
Types mailing address
Packages requested materials
Sends requested catalog to Mailing
Files index card
Delivers packages to Mailing

8. GIVEN PUNCHED CARDS, SCHEDULE INFORMATION, AND COMMERCIAL CONTRACTS, THE WORKER ARRANGES SCHEDULES FOR COMMERCIALS ON THE AIR. (5 task sheets)

Receives radio log schedule/punched cards/copy of network program changes/ commercial contract sheet/salesman's order
Obtains calendar for commercials
Checks commercials to be run/traffic board for conflicts of product advertising
Records programs, times for airing in reminder book
Arranges schedules for commercials, public service announcements/time slots/ order of commercials
Sorts punched cards
Counts commercial segments on traffic board
Types tab noting change
Posts tab noting change on traffic board for day
Places punched cards in visible revolving file according to time slot
Delivers schedule to program announcer
Files copy of network program changes in traffic control files/contract copy

9. GIVEN A REQUEST FROM A CUSTOMER OR SALESMAN, THE WORKER COMPUTES AND TYPES PRICE QUOTATIONS. (8 task sheets)


Start
Receives quotation request
Writes requester's number, name, date due in book
Locate rates ?
Yes
Locates rates
No
Obtains quotation from supervisor
Types formal quotation/ request card/quotation proposal form
Proofreads quotations
Duplicate ?
Yes
Duplicates request form
No
Obtains signature on request, quotation form
Records request, sending of quotation in log
Files request cards
Delivers request to Comptroller/ proposal form to messenger
Mails quotation to requester
End

HARDWARE

Typewriter
Files

SOFTWARE

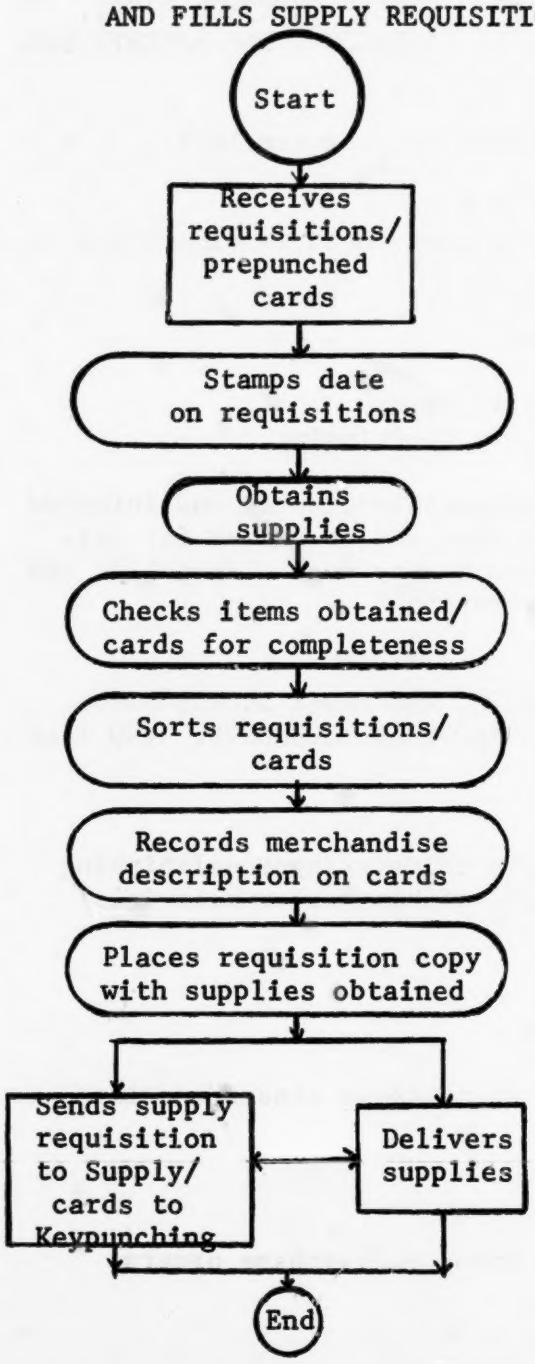
Quotation request book
Rate book
Request card
Formal quotation form
Bid quotation form

EDUCATIONAL CUES

Accuracy
Checking
Typing
Filing

REPORTED CRITERIA: "A correct quotation is a must"

10. GIVEN COMPANY SUPPLY REQUISITIONS OR PREPUNCHED CARDS, THE WORKER COMPUTES AND FILLS SUPPLY REQUISITIONS FOR COMPANY SALESMEN. (2 task sheets)


Start
Receives requisitions/ prepunched cards
Stamps date on requisitions
Obtains supplies
Checks items obtained/ cards for completeness
Sorts requisitions/ cards
Records merchandise description on cards
Places requisition copy with supplies obtained
Sends supply requisition to Supply/ cards to Keypunching
Delivers supplies
End

HARDWARE

Four-wheel delivery cart
Microfilm reader

SOFTWARE

Requisitions
Supplies
Microfilm catalog
Microfilm of supply description
Punched cards

EDUCATIONAL CUES

Checking

REPORTED CRITERIA: "Make sure the correct supplies are obtained; Decisions must be made to substitute color for one not in stock; Attention to details"

11. GIVEN INSTRUCTIONS, THE WORKER OPERATES A GRAPHOTYPE MACHINE TO PREPARE NEW PLATES FOR NEW CUSTOMERS OR ADDRESS CHANGES FOR OLD CUSTOMERS. (1 task sheet)

Receives instructions
Makes up new plates as requested
Destroys old plates
Makes index card for some plates
Returns index card to person from whom instructions were received
Places plates in tray in proper order

12. GIVEN CUSTOMER ACCOUNTS, EXPIRED ADS, AND PROSPECTIVE CUSTOMER LISTS, THE WORKER EXPLAINS AND OBTAINS NEW ORDERS OR EXTENSIONS FOR ADVERTISING. (7 task sheets)

Receives customer accounts/expired ad list/prospective customer list
Calls customer/prospective customer
Verifies customer satisfaction of newspaper ad service
Checks that there are no billing problems/if extension on ad is wanted/day ad is to run/ad wording with customer
Requests more advertising from customer
Discusses format and techniques/special services
Types new ad on form/insertion orders
Records permission for ad printing/follow-up on ad card
Delivers ad to Accounting/ad, insertion order form to Printing

REPORTED CRITERIA: "Must be persistent, keep account interested and informed concerning the paper; Must be eager to help customer and do favors for certain clients; Knowledge of newspaper jargon; Know how to deal with public and have patience; Must have a good feeling for advertising"

13. GIVEN CHARGE SLIPS, PURCHASE ORDERS, WARRANTS, AND OTHER SOURCE DOCUMENTS, THE WORKER CHECKS, SORTS, AND FILES REQUIRED DOCUMENTS. (30 task sheets)

ACQUISITION

RECEIVES
    ad charge slips/purchase orders/warrants/file folders/invoices/shipping orders/requests to pull invoices and shipping tickets/sales materials/contracts/ad copies

PROCESS

SORTS
    ad charge slips/warrants/inactive ad copies
CHECKS
    ad charge slips/purchase order codes/names on purchase orders/routing slips on folders
COMPILES
    new customer file
Pulls
    corresponding shipping order or tickets or invoices/purchase orders
DUPLICATES
    customer invoices
Attaches
    shipping orders, invoices/purchase orders, acknowledgements
DETERMINES
    correct filing code for correspondence

DISPOSITION

FILES
    correspondence/purchase orders/charge slips/warrants/folders/shipping orders, invoices/acknowledgements/contracts/sales materials/inactive ads

14. GIVEN TRANSMITTALS INDICATING INSTALLED AND UNINSTALLED EQUIPMENT, THE WORKER CHECKS AND RECORDS EVERY MACHINE MOVED IN A PERIOD OF 30 DAYS. (1 task sheet)

15. GIVEN DICTATION, INCOMING MAIL, AND OTHER SOURCE DOCUMENTS, THE WORKER TYPES CORRESPONDENCE. (24 task sheets)

ACQUISITION

RECEIVES

dictation/letters regarding customer complaints/bid specifications/list of customer accounts overdue/account status information/statements/product information request/customer purchase orders/request for information letter/customer request for expenditure report/list of needed bills of lading

PROCESS

Pulls

customer files for reference

CHECKS

letters/proper enclosures/if should be turned over to lawyer for collection/customer orders

Selects

form letter to use

TYPES

shorthand notes/letters to customers with complaints/bid specification letters/reminder of overdues to customers/letter to lawyer to start collection procedures/collection letter (form)/customer order acknowledgement/expenditure report/monthly statement/bills of lading

Proofreads

letters

Obtains

signature on letters

DUPLICATES

bid specification letters

RECORDS

attorney request on customer card/customer request

DISPOSITION

FILES

copy of letters

MAILS

letters/monthly statements

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Form letters	Typing
Files	Customer cards	Filing
		Checking

REPORTED CRITERIA: "Neatly typed letters with good spelling and correct grammar; Answer letters immediately; Careful proofreading; High level ability to read quickly and accurately"

16. GIVEN CUSTOMER ORDERS, THE WORKER INVESTIGATES BACK ORDERS AND OLD, UNFILLED ORDERS. (1 task sheet)

17. GIVEN WRITTEN NOTICE OF PRODUCT DELIVERY, THE WORKER COMPLETES FORMS FOR INSTALLATION OF BUSINESS EQUIPMENT. (1 task sheet)

18. GIVEN CUSTOMER ORDERS, INVOICES, AND MEMOS, THE WORKER CHECKS AND TYPES ORDERS AND MEMOS. (16 task sheets)

Receives customer order/invoices/memos
Sorts invoice copies
Checks if customer has card/shipping order with invoice/invoice information
Types new customer card/credit rating on customer card
Refers to credit rating manual for customer credit rating
Types order, terms on order form, customer card/charges on order form/billing invoice/extension date on invoice
Computes federal, state tax to be charged/total invoices/charges for items on invoice
Checks invoice totals/invoices for completeness
Stamps remittance number on invoice/invoice if cancelled/back order notation
Records invoice totals in salesmen's records/shipping date changes
Sorts invoice copies for filing at end of day
Mails invoices to salesman/customer
Files customer card/invoice copy/shipping order
Delivers order form to credit manager/invoices to Billing/back orders to Sales/ bills of lading to Keypunching

19. GIVEN ORDERS, PRINTOUTS, CHANGES, AND CUSTOMER REQUESTS, THE WORKER POSTS AND RECORDS ITEMS. (9 task sheets)

Receives orders/printouts of newspaper circulation/cards of salesmen's calls/ newspaper route changes/request to transfer account from another city
Sorts orders
Pulls customer card
Computes district totals of news circulation
Records customer name, address, date, order number, items ordered in log/ district newspaper circulation totals/salesmen's calls on customer card
Posts district totals to ledger
Codes prices on orders
Types list of monthly sales calls on form
Totals individual customer orders
Files purchase orders/printouts/salesmen's card/copy of sales calls form
Delivers orders to supervisor, file clerk/copy of sales calls form to supervisor/route changes to Data Processing/transfer to Accounting

20. GIVEN REQUESTS, THE WORKER HANDLES CORRESPONDENCE CONNECTED WITH TRAVEL CONTRACTS FOR EMPLOYEES' SPEAKING ENGAGEMENTS. (1 task sheet)

21. GIVEN DETAIL TICKETS FOR CHARGE SALES, RETURN OF SOLD MERCHANDISE ON CREDIT, OR PAYMENTS ON ACCOUNT, THE WORKER MICROFILMS ALL DETAIL TICKETS. (1 task sheet)

22. GIVEN INCOMING MAIL OF NEWSPAPERS AND MAGAZINE ADVERTISEMENTS FROM CLIPPING AGENCY, THE WORKER SORTS AND FILES ADS FOR COMPANY RECORDS. (1 task sheet)

23. GIVEN REVISIONS, PRICE LISTS, MAILING LISTS, OR GALLEY PROOFS, THE WORKER UPDATES MANUALS, CATALOGS, PRICE LISTS, AND CUSTOMER ACCOUNTS. (9 task sheets)

Receives catalog revisions/new price lists/new pages for books/galley proofs/customer account cards/mailing lists
Checks changes/galley proof/customer account cards
Pulls old catalog/pages
Types revisions
Cuts revisions into strips with one item per strip
Sorts strips alphabetically
Pastes strips on paper
Proofreads revision paper
Inserts revisions in catalog/manual
Records changes in catalog
Duplicates final changed sheet
Delivers pasted strips, galleys to Printing/final changed sheet to supervisor
Files changes/mailing list changes

24. GIVEN MEMOS, CUSTOMER LETTERS OF COMPLAINT, AND COPIES OF TV COMMERCIAL INFORMATION, THE WORKER COMPOSES AND TYPES ITEMS. (8 task sheets)

Receives memo of coming event/copy of commercial (TV) information/customer letter of complaint
Composes necessary information for memo, calendars/rough commercial copy/answer to customer letter
Refers to catalogue for verification of prices and other requested information
Types memo and publicity copy for coming events/commercial information/composed and form letters
Proofreads commercial copy
Records commercial information on dubbing sheet, instruction card
Determines literature to enclose
Files copy of publicity sheets/dubbing sheets
Places memo in memo box
Delivers dubbing sheet to Control room

25. GIVEN A LIST OF NEW BOOKS TO BE PUBLISHED, THE WORKER PROCESSES DUMMY BOOKS. (1 task sheet)

Receives list of new books to be published
Types letter to authors or editors requesting data
Files copy of letter
Receives dummy books from Printing
Pastes book jacket on dummy book
Mails dummy book to Photographing
Receives dummy book with glossy photographs
Checks for correctness and completion
Mails dummy book to Engraving
Receives art work plates
Checks art work plates for correctness
Mails art work plates to Engraving
Receives art work plates, dummy book, glossy photographs

Files photographs
Delivers plates to Printing
Holds dummy book in specified box

26. GIVEN PUBLIC RELATIONS PROMOTIONS INFORMATION, THE WORKER ASSISTS THE COMMITTEES IN PROMOTIONS ACTIVITIES. (1 task sheet)

Mails entry blanks to candidates for "Teacher of the Year"
Receives completed entry blanks from candidates
Types candidates name on card
Sorts cards by districts
Mails cards to judges for elimination
Receives cards of semi-finalists
Files cards alphabetically
Types news release announcement naming semi-finalists and letter to semi-finalists
Orders plaques and certificates for winners
Mails cards of semi-finalists to judges for elimination
Receives cards of finalists
Files cards alphabetically
Types news release announcing finalists/letter to finalists notifying them to appear for final competition

27. GIVEN TICKETS AND MERCHANDISE, THE WORKER HANDLES LAY-AWAY. (1 task sheet)

28. GIVEN A LIST OF PLANTS CARRYING THE COMPANY'S PRODUCTS, THE WORKER TRACES BY TELEPHONE THE BUSINESSES NOT REPORTING GOODS SOLD OR MONIES COLLECTED. (1 task sheet)

29. GIVEN A REQUEST FOR A COMMERCIAL PHOTOGRAPHER TO TAKE PICTURES OF EQUIPMENT MANUFACTURED, THE WORKER WRITES THE ORDER AND ARRANGES DATES FOR PHOTOGRAPHING. (1 task sheet)

30. GIVEN A REQUEST, THE WORKER COLLECTS AND COLLATES FOLDERS OF PAPER SAMPLES FOR SALESMEN OR CUSTOMERS. (1 task sheet)

31. GIVEN A REQUEST FOR INSURANCE INFORMATION, THE WORKER DETERMINES ELIGIBILITY OF CUSTOMER, COMPUTES RATES, AND INFORMS CUSTOMER OF INSURANCE COVERAGE. (1 task sheet)

32. GIVEN THE RESPONSIBILITY OF PRODUCING A SALES PLAN, THE WORKER COMPILES A SALES PLAN FOR DEPARTMENT STORE YEARLY SALES. (1 task sheet)

SALES CRITICAL INCIDENTS

"When assigned to check on back orders, he devised a summary sheet needed to accumulate the information. The sheet is now retained where all the salesmen have access to it, so that several people do not have to answer the same questions again and again."

"The worker took an ad for a burglar alarm company and erred in writing the copy. He wrote 'Must have burglar experience.' The company complained that they were deluged with calls and requested a correction and rerun."

"Today a customer called in an order for a tractor gear. The worker did a good job of 'suggestion selling,' which is suggesting those associated parts which will be needed to install the gear. By having a thorough knowledge of these parts, the worker was able to sell the customer additional, necessary parts."

"During a peak rush time in the summer months when many more people in the area were ordering milk, the employee was exceptionally efficient in getting the orders issued to the deliverymen on time without causing any late deliveries to customers."

"Employee does not get enough information on the phone from customers regarding their placement of orders. One instance of this was when a customer wanted the order to be specially delivered in an emergency to a restaurant and the employee failed to make a note of this special delivery to the routeman."

"Because of the Apollo 11 moon flight, much of the regularly scheduled broadcasting had to be delayed as well as all the commercials. The worker received a 14-page instruction sheet from the network concerning rescheduling information. She did a marvelous job of figuring it out and rescheduling the original programs and commercials."

"The worker once failed to log a commercial that had been sold. She thought she had already posted it, but she hadn't. As a result the customer complained, and the salesman of the account lost his commission for it."

8.1 CLIENT RELATED, HOTEL/MOTEL

1. GIVEN GUEST'S CHARGES, THE WORKER POSTS THE CHARGES TO ROOM FOLIOS. (4 task sheets)

Receives telephone charges/cleaned laundry/laundry tickets/restaurant tickets
Pulls room folio
Checks all room charges
Posts telephone, laundry, and restaurant charges on posting machine
Totals all charges at end of day
Batches tickets and adding machine tapes with rubber band
Files room folio
Places telephone, laundry, and restaurant tickets in box/cleaned laundry on shelf
Delivers batched tickets to manager

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Posting machine	Laundry	Computational skills
Adding machine (10-key)	Laundry tickets	
	Restaurant tickets	
	Telephone charges	

REPORTED CRITERIA: "Accuracy important to avoid error on guest's bill; Totals must balance"

2. GIVEN COMPLAINT, THE WORKER INTERACTS WITH PEOPLE IN NEGOTIATING COMPLAINTS OF GUESTS AND EMPLOYEES. (2 task sheets)

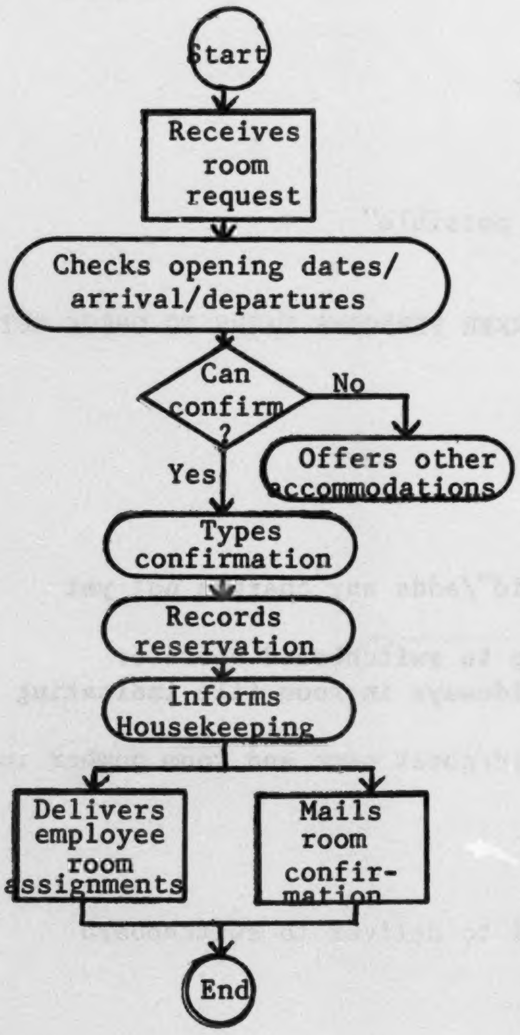
Receives complaint
Records complaint information
Consults reference manuals or files
Discusses complaint and offers apology
Negotiates solution or
Refers guest to Assistant Manager

3. GIVEN REQUESTS FOR ROOMS BY GUEST, THE WORKER CHECKS IN GUESTS. (5 task sheets)

Receives guests requesting rooms
Pulls copy of reservation slip
Checks vacancies or reservation cards
Requests guest complete registration card or room folio
Records data of stay on registration card/data on check-in slip
Assigns room number
Obtains room key
Calls bellman to show guest to room
Writes pertinent guest information on guest invoice
Types room folio
Delivers room key to motel/hotel guest
Distributes copy of guest invoice to Cashier, telephone operator, room slot
Files reservation card in visible file/check-in slip/room folio

REPORTED CRITERIA: "Should not keep guests waiting; Treat all guests alike regardless of station in life; Careful not to overbook a room; Try to satisfy guests at all times"

4. GIVEN A REQUEST FOR ROOMS, THE WORKER HANDLES RESERVATIONS. (2 task sheets)


Start
Receives room request
Checks opening dates/ arrival/departures
Can confirm ?
No
Yes
Offers other accommodations
Types confirmation
Records reservation
Informs Housekeeping
Delivers employee room assignments
Mails room confir-mation
End

ACQUISITION

RECEIVES
request for rooms/reservations

PROCESS

CHECKS
dates for openings/arrival date, room type, rate, departure date, name, and address if guaranteed reservation/reservation
(Confirms)
reservations
(Offers)
other accommodations
TYPES
confirmation form
RECORDS
suites ten days in advance
INFORMS
Housekeeping and Room Service of arrival dates

DISPOSITION

MAILS
reservation confirmation
DELIVERS
room assignments to employees

HARDWARE	SOFTWARE
Typewriter	Reservation slips Room assignment slips

EDUCATIONAL CUES

Typing
Communication skills

5. GIVEN RESERVATIONS, THE WORKER DETERMINES VACANCIES AND INFORMS STAFF OF CAPACITY. (2 task sheets)

Counts reservations/vacancies
Determines number of check-outs by estimating, adds vacancies, subtracts reservations/number of reservations hotel can accept
Informs staff to close off/leave open for reservations

6. GIVEN INCOMING MAIL/MESSAGES, THE WORKER SORTS, DISTRIBUTES ITEMS TO ADDRESSEES. (4 task sheets)

Receives incoming mail/messages/packages
Sorts mail for guests and hotel/motel
Dates and time stamps all mail/messages/mail for guests by machine
Sorts guest mail alphabetically
Writes room number on guest's envelopes
Arranges guest mail by room number
Records messages/package delivery
Places guest mail in key boxes by room number
Calls guest
Informs guest of item delivered

REPORTED CRITERIA: "Sort mail as quickly as possible"

7. GIVEN GUEST REQUESTING CHECK OUT, THE WORKER PERFORMS TASKS TO CHECK OUT GUEST. (3 task sheets)

Receives guest
Requests room number
Pulls room folio/check-in slips/statement
Checks statement to be sure all is recorded
Receives cash or check
Posts items in posting machine and marks "paid"/adds any charges not yet included
Delivers copy of folio to guest/check-in slip to switchboard operator
Places tag on room box/turns check-in slip sideways in room file indicating room to be cleaned/payment in cash register
Records room number on check-out form for maid/guest name and room number in log
Writes "out" on paid invoice
Files room folio to await audit

SUPPLEMENTARY STEP: Receives paid hotel bill to deliver to switchboard operator

8. GIVEN BOOKINGS OF ACTIVITIES, THE WORKER TYPES A FUNCTION SHEET TO INFORM THOSE CONCERNED. (1 task sheet)

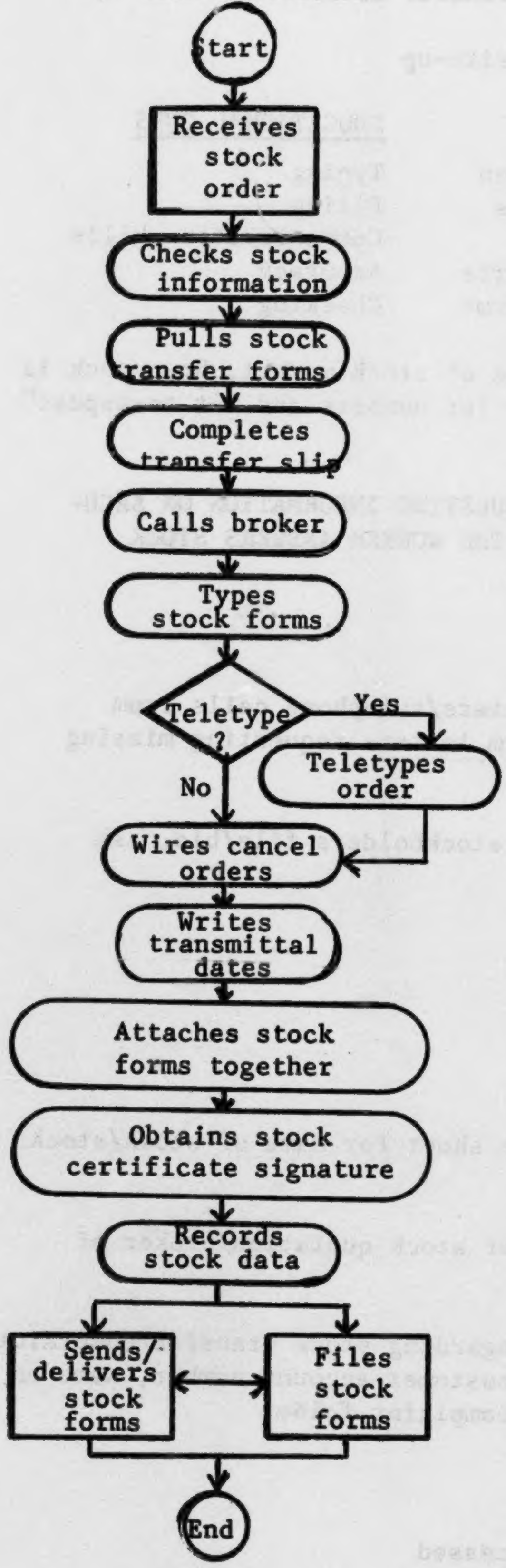
Receives bookings book/number of rooms occupied by specific guests/type of function--food or meeting/time/number of persons
Types information of each function on liquid process master
Duplicates 150 copies of function sheet
Places function sheets in mail boxes of specific guests' rooms
Holds copies of function sheets three days before discarding

HOTEL/MOTEL CRITICAL INCIDENT

"The worker wrote down the number of the guest's room instead of the amount of money that should be charged for the phone calls on the bill. The guest questioned this amount and the employee had to write in an adjustment on the bill in pen and then make a credit on the bookkeeping machine."

8.2 CLIENT RELATED, SECURITIES

9. GIVEN SOURCE DOCUMENTS SUCH AS STOCK CERTIFICATES AND CUSTOMER ORDERS, THE WORKER CHECKS AND TYPES FORMS FOR BUYING, SELLING, AND TRANSFERRING STOCKS. (9 task sheets)


Start
Receives stock order
Checks stock information
Pulls stock transfer forms
Completes transfer slip
Calls broker
Types stock forms
Teletype ?
Yes
Teletypes order
No
Wires cancel orders
Writes transmittal dates
Attaches stock forms together
Obtains stock certificate signature
Records stock data
Sends/ delivers stock forms
Files stock forms
End

ACQUISITION

RECEIVES
customer information/stock ownership/stock certificate/customer order/written instructions from client/computer sheets

PROCESS

CHECKS
stock certificate for signature/customer order for missing information/computer sheets for entries indicating stock delivered out

Pulls
request for transfer forms from numbers on computer sheets

Completes
transfer slip

CALLS
broker regarding account

TYPES
customer information on account application/agent, stock name, number of shares, stock certificate number on stock ownership form/customer name, name of new owner on stock certificate/stock certificate for transfer of ownership

(Teletypes)
customer order

Wires
salesman to cancel open orders

Writes
date of transmittal on request for transfer form

Attaches
stock ownership to stock certificate/stock certificate and transfer together/transfer slip to status report

Obtains
signature on stock certificate

RECORDS
list of names and quantities of security

DISPOSITION

Sends
status report and notice of transfer to New York

DELIVERS
account application to manager

Places
  stock certificate in box/customer order on conveyor belt
FILES
  stock certificate and transfer/request for transfer form

SUPPLEMENTARY STEP: Duplicates letter/stock write-up

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Account application	Typing
Teletype	Stock certificates	Filing
Conveyor belt	Computer sheets	Communication skills
Telephone	Stock status reports	Accuracy
Files	Stock transfer forms	Checking

REPORTED CRITERIA: "Should have some knowledge of stock market, how stock is traded, stock terminology; Must have sharp eye for numbers and not transpose"

10. GIVEN SOURCE DOCUMENTS SUCH AS LETTERS REQUESTING INFORMATION ON SECURITIES OR TELEPHONE CALLS FROM CUSTOMERS, THE WORKER ANSWERS STOCK QUESTIONS AND QUOTATIONS. (6 task sheets)

ACQUISITION

RECEIVES
  request for quotation/customer complaint letters/telephone calls from brokers regarding dividends not received/form letters requesting missing information on stock certificate transfer
Obtains
  customer information for transfer form from stockholders file/bid, ask price

PROCESS

RECORDS
  customer complaint in complaint register
Writes
  request of caller
CHECKS
  records for dividend information/daily quote sheet for name of stock/stock summary
INFORMS
  broker if dividend processed or not/caller of stock quotation/broker of price
TYPES
  requested information from transfer agent regarding stock transfer/complaint summary sheet and customer data card/date, customer account number, name on sales report card/complaint report/tab for complaint folder
Proofreads
  all typed materials
Issues
  instructions for checks if dividend not processed

DUPLICATES
customer complaint letter
COMPILES
customer complaint folder
CALLS
brokers regarding reason dividend was not received/broker to obtain quote
Inquires
amount of dividend
RECORDS
receipt/non-receipt of dividend

DISPOSITION

FILES
customer data card/customer complaint
MAILS
answered inquiry
Sends
quote for which no listing is found direct to New York/customer complaint file to Complaints

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Telephone	Stock quotation chart	Communication skills
Typewriter	Stock summary	Typing
Files	Complaint register	Filing
	Complaint summary sheet	Accuracy

REPORTED CRITERIA: "Double check to make sure check was not previously sent; Some technical knowledge of brokerage business"

11. GIVEN STOCK TICKETS, CONFIRMATIONS, REQUESTS, AND CHECKS, THE WORKER RECEIVES PAYMENTS, DISTRIBUTES STOCK CERTIFICATES, AND RECORDS STOCK TRANSACTIONS. (10 task sheets)

ACQUISITION

RECEIVES
checks/salesman's payout request/stock papers/confirmation/brokers' commission sheets/receipts/status reports/sets of stock and correspondence documents/status sheets/batch tickets/stock dividend sheet

PROCESS

Pulls
customer account card/stock certificate
SORTS
confirmations--bought or sold/stock confirmation sheets by broker/receipts numerically/batch tickets into credit, debit, cash, or checks
Stamps
time on all documents received from New York/check with endorsement/payout request "paid"
CHECKS
computer printout sheets for overlooked payout requests/transaction and

amount of commission due broker/name on stock

DETERMINES

who is to receive payments for dividends

COMPUTES

amount due to cover order confirmation/totals on each customer account card/ totals of each category of batch tickets

Compares

check with confirmation slip in amount, signatures/payout request with computer printout sheet/confirmations with status reports for accuracy

Posts

stocks delivered to customers account/credit of dividend amount to customer account/stock transaction by stock name in stock books/receipts to status reports/cash and securities to customer account

TYPES

receipt/checks for approved payouts

Writes

receipt of completed stock transaction/"kept" on stocks/note to cashier for signature on checks for $10 or less/note to Assistant Manager to sign checks over $10

Obtains

cashier signature

Attaches

adding machine tapes to batch ticket/batch ticket to bundle of tickets

RECORDS

receipt of check on customer account card/stock transaction/receipts in account book/code number, name, total on batch tickets

DISPOSITION

FILES

check copy/completed stock transaction

DELIVERS

completed stock transaction to Credit, Accounting/batched tickets to Auditing

Distributes

copies of receipt to broker, customer, New York Office

Places

checks in safety box/stock confirmation sheets in box/commission sheets, stock confirmation on broker's desk

MAILS

copies of check to New York/check to customer/stock and receipt to customer by registered mail

HARDWARE

Endorsement stamp
Typewriter
Adding machine
Checkwriter
Files

SOFTWARE

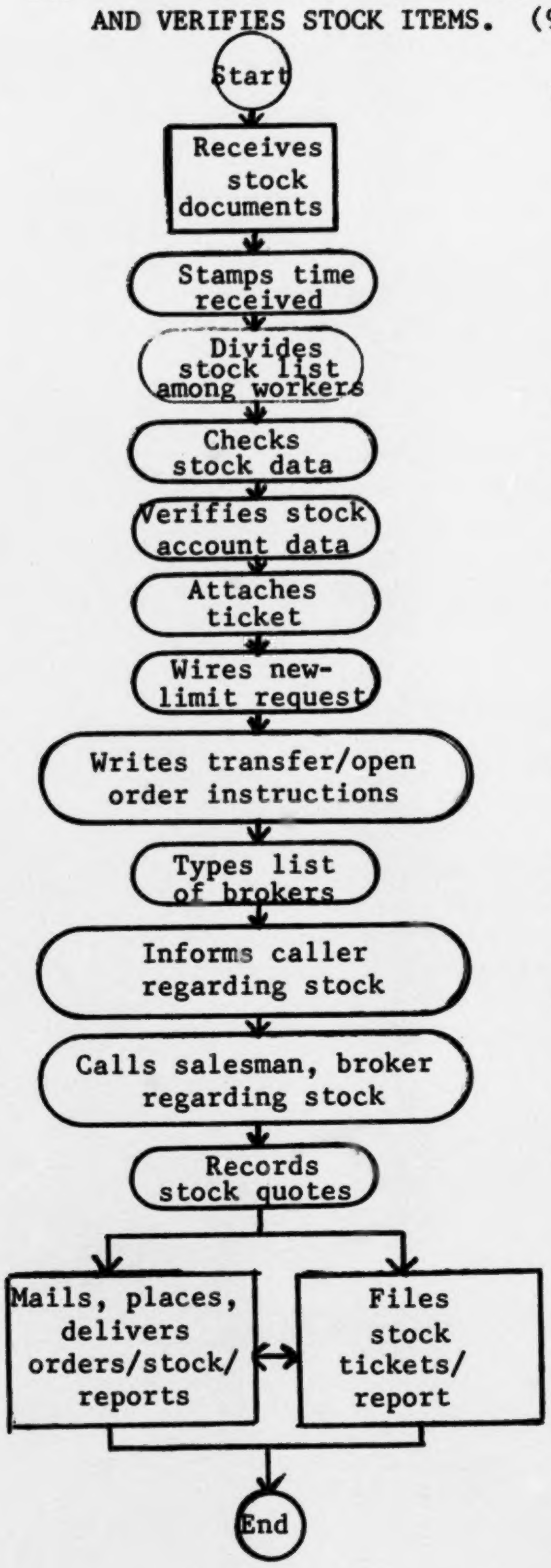
Checks
Customer account card
Payout requests
Stock books
Commission sheets
Receipts
Account book
Status sheet
Batch tickets

EDUCATIONAL CUES

Typing
Computational skills
Checking
Filing
Accuracy
Securities terminology

REPORTED CRITERIA: "Should type 55 wpm with high degree of accuracy; Needs to know money and banking jargon and wire abbreviations"

12. GIVEN DOCUMENTS SUCH AS ORDERS, LISTS, OR ORAL REQUESTS, THE WORKER CHECKS AND VERIFIES STOCK ITEMS. (9 task sheets)


Start
Receives stock documents
Stamps time received
Divides stock list among workers
Checks stock data
Verifies stock account data
Attaches ticket
Wires new-limit request
Writes transfer/open order instructions
Types list of brokers
Informs caller regarding stock
Calls salesman, broker regarding stock
Records stock quotes
Mails, places, delivers orders/stock/reports
Files stock tickets/report
End

ACQUISITION

RECEIVES
customer call/list of brokers/order on conveyor belt system/original ticket/report wire showing transaction/dividend notices/mail/signed instructions from salesmen/list of 100 most frequently requested stocks

PROCESS

Stamps
time on report/mail
Divides
100 most frequently requested stocks among three workers
CHECKS
information on ticket and report/open orders to locate orders affected by dividend/corrections on orders/stock data/mail with records/if customer account paid/to see if stock is being held
Verifies
account accuracy with filed data
Attaches
report and original ticket
Wires
request for new limit on order
Writes
transfer instructions to broker/transfer quote to master list/broker number on confirmation/open order notices to salesman
TYPES
list of brokers who have not received confirmations
INFORMS
caller whether or not stock is being held
CALLS
salesman to inform him of special information/each broker handling stock requesting quotes
RECORDS
stock quotes

DISPOSITION

Places
new orders on wire

MAILS
  stock to New York by registered mail
FILES
  original ticket/original and stapled report
DELIVERS
  report to salesman/open order notice to Addressing/list of brokers to supervisor

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Conveyor belt	Stock order	Typing
Typewriter	List of brokers	Communication skills
Telephone	Wires	Filing
Files	Dividend notices	Accuracy
	Stock tickets	

REPORTED CRITERIA: "Salesmen are kept up to date on latest developments on certain orders; Quote sheets are updated daily"

SECURITIES CRITICAL INCIDENTS

"Another department had a wrong description of a bond. They could not locate the right records for this security. This employee was asked to help. Although this was not part of his job, he seemed more than glad to assist. He was effective because he was able to make the comparison that the other employee could not make."

"He listed a wrong broker number on a confirmation. By the time the error was discovered many records were made up with the wrong number. It is an additional job to check back all the records and make the correction. This could be avoided if an employee is more conscientious and realizes the consequences of an error."

"Yesterday we sold some securities for a company and she forgot to debit their account. If I hadn't caught it, the account would have showed no balance and we would not have invested the money in any other securities for them."

"A customer had not paid for securities within 7 days. This employee failed to apply to the NY Stock Exchange for an exttension of time. As a result the account was put in "violation status." This could subject the firm to criticism by the exchange. This was due to failure to follow-up the account."

13. GIVEN A CHECK POINT IN TIME TO INQUIRE WHY STOCK TRADES HAVE NOT BEEN PAID, THE WORKER WIRES BRANCH STOCK OFFICES REQUESTING REASONS FOR TIME EXTENSIONS FOR PAYMENT AND RECORDS REASONS ON TIME EXTENSION REFUSED OR ACCEPTANCE. (1 task sheet)

8.3 CLIENT RELATED, EDUCATION

14. GIVEN APPLICATIONS OR APPLICANTS, THE WORKER HANDLES APPLICATIONS OF NEW STUDENTS. (8 task sheets)

ACQUISITION

RECEIVES
  applicant/application/check/pre-registration cards

PROCESS

Inquires
  nature of visit
Requests
  applicant complete application
SORTS
  pre-registration cards by department
CHECKS
  application for all pertinent information
COMPILES
  new student file
Requests
  transcripts
Assists
  students in selecting schedule/student with information
TYPES
  student records information/form letter of rejection
Attaches
  check to application
RECORDS
  sending of reject letter/reject name on list/grades

DISPOSITION

Directs
  student to counselor
DELIVERS
  application to typist/student file to Counseling/pre-registration cards to Mailing for department mail boxes
Sends
  information catalog and forms to inquirer/copy of student record information, check to Cashier
FILES
  copy of student record
MAILS
  rejection form letter

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Applications	Accuracy
Files	Registration cards	Typing
	Checks	Filing
	Student records	Checking

REPORTED CRITERIA: "Pleasant, outgoing personality; Good appearance"

15. GIVEN CLASS TICKETS, PRE-REGISTRATION CARDS, AND REQUESTS TO REGISTER, THE WORKER ASSISTS STUDENTS IN REGISTRATION. (6 task sheets)

ACQUISITION

RECEIVES
student registration card/class tickets/request to register/pre-registration card/requested class list/list of entering students/transfer student records

PROCESS

CHECKS
registration card for accuracy and completeness/class tickets for physical education requirement/pre-registration card/requested classes

Codes
transfer student records

Arranges
students' schedules/interviews

TYPES
schedule of classes

Writes
initials on class tickets/student data on registration form/total number of transferred hours

Stamps
ID card for enrollment proof

INFORMS
counselor of interview and time

CALLS
department to see if requested class is open

DISPOSITION

DELIVERS
information to student

Distributes
schedules of classes to Data Processing, main office

FILES
enrollment materials/registration form/pre-registration card/schedule of classes/transfer papers

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Files	Registration cards	Filing
Typewriter	Class tickets	Typing
Stamp	ID cards	Accuracy
	Class schedules	Checking
	Pre-registration cards	

REPORTED CRITERIA: "Knowledge of all courses required; Obtain and record all information accurately"

16. GIVEN LISTS, SCHEDULES, LETTERS, AND REPORTS, THE WORKER TYPES OR WRITES EDUCATIONAL MATERIALS. (27 task sheets)

ACQUISITION

RECEIVES

student enrollment list/weekly schedule/athletes and coach's sports eligibility list/request for verification of driver training certification/rough draft of schedule, letter, or course outlines/curriculum guide/transcript request/syllabi/observation and evaluation of faculty/news articles/photographic plates of news/printed newsletter/application for certifying information/request for information/tests/requests to make accident report/accident claim forms/claim check

Obtains

driver training file/student transcript/information from accident victim

PROCESS

CHECKS

list or schedule for completeness/sports eligibility lists against each other/curriculum guide format/legality of sending transcript/files for previous correspondence from alumnus/syllabi/observation, evaluation sheets/certification application/semester units/rough draft of test

SORTS

sports eligibility lists alphabetically

Discusses

solution with donor alumnus

Writes

weekly schedule information on window board with grease pencil (instructors and exams listing)/course description/shorthand reply to request

Arranges

layout for newspaper

TYPES

acceptance, rejection, and alternate letters/lists of students and data for student roster/data sheet on each new student/student code card/student statistical reports/stencil of student enrollment list/weekly schedule on multilith/schedule/sports eligibility lists on master/drivers training verification/list of driver training certificates/letters or course outlines/curriculum guides/summary reports/syllabi/observation and evaluation of faculty/rough draft and final news articles/verification of units in letter/tests on masters/accident report/claim forms

Proofreads

enrollment lists/schedules/letters/course outlines/syllabi/layout/tests

DUPLICATES

weekly schedule/sports eligibility lists/curriculum guide/transcript/program/course outline/tests

Collates

duplicated materials

Staples

duplicated materials

Obtains

signature on letters/transcripts/approval of syllabi, program, observation, evaluation of faculty, test, of doctor, nurse on accident report/signature on certification verification

COMPILES

student file

RECORDS
athlete names by sport/doctor's charges/amount of claim checks to ledger
Pulls
list of driver's training certificates/student lists

DISPOSITION

Sends
memo on graduate students to department chairman/back money received with transcripts requests/syllabi to Duplicating/observation, evaluation to Dean/news articles for editing
DELIVERS
Special Services a list of class enrollees/window board to another worker/final schedule to Dean/drivers training verification to student/finished letter copies to supervisor/duplicated course outline to professor/layout to Printer/photographic plates to Printing/certificate verification to student
FILES
letters in folder/sports eligibility list/copy or stencil of curriculum guide/copy of course program/newsletter/certificate verification/copy of accident report
MAILS
letters/sports eligibility lists to all coaches, principals, and athletic directors/list of drivers training certificates to State department/transcripts to applicant/course program/accident form copy to state high school league, parents/claim form/claim check to parents

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Code card	Typing (statistical, straight copy)
Window board	Grease pencil	
Duplicator	Enrollment lists	Accuracy
Files	Weekly schedules	Checking
	Reports	Proofreading
	Class schedules	Filing
	Checks	

REPORTED CRITERIA: "Work under pressure; Tact handling faculty members; Must be trustworthy, keep materials confidential; Minimum shorthand ability; Be familiar with supervisor's abbreviations; Letters must be well arranged; Neat and centered duplicated materials; Must exercise judgment and discretion to avoid friction or possible prosecution; Average typing ability; Must have ability to discover errors in work handed to her; Artistic in layout of news; Words divided properly; Do not end paragraph with one word on a line"

17. GIVEN ABSENTEE REPORTS OR ORAL MESSAGE, THE WORKER CHECKS AND RECORDS ATTENDANCE. (4 task sheets)

ACQUISITION

RECEIVES
tardy student/attendance card for absent students/monthly attendance reports for county/telephone message about absentee teachers/parent approval for ill students to go home

PROCESS

- SORTS
  - attendance cards alphabetically
- Obtains
  - reason for tardiness
- COMPUTES
  - totals on monthly county attendance report
- CHECKS
  - totals on monthly county attendance report/files for teacher replacement
- DETERMINES
  - validity of tardy excuse
- CALLS
  - absent student's home
- Writes
  - student's name, excuse, arrival time on record sheet/tardy pass/absence reason on attendance card/corrections, totals on monthly attendance report/withdrawal card for each withdrawal listed/information regarding substitute for payroll/excused absence for ill student on absence list
- TYPES
  - master list of students absent, tardy, excused on master/state report form from summary of attendance/school board report using attendance summary
- Obtains
  - signature of superintendent on state report form
- DUPLICATES
  - list of absent, tardy, excused students

DISPOSITION

- FILES
  - withdrawal cards/state report form copy
- DELIVERS
  - tardy pass to student/attendance cards to homeroom teacher/monthly attendance reports and summary of attendance to supervisor/teacher and absentee report and substitute data to Payroll

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	State attendance report	Computational skills
Adding machine (10-key)	forms	Typing
Files	Withdrawal cards	Filing
Telephone	Tardy pass	Accuracy
	Absentee report	Checking
		Communication skills

REPORTED CRITERIA: "All homes must be contacted and a reason recorded for absence"

18. GIVEN MONIES, THE WORKER HANDLES FUNDS AND FEES FOR STUDENTS AND STUDENT FUNCTIONS. (6 task sheets)

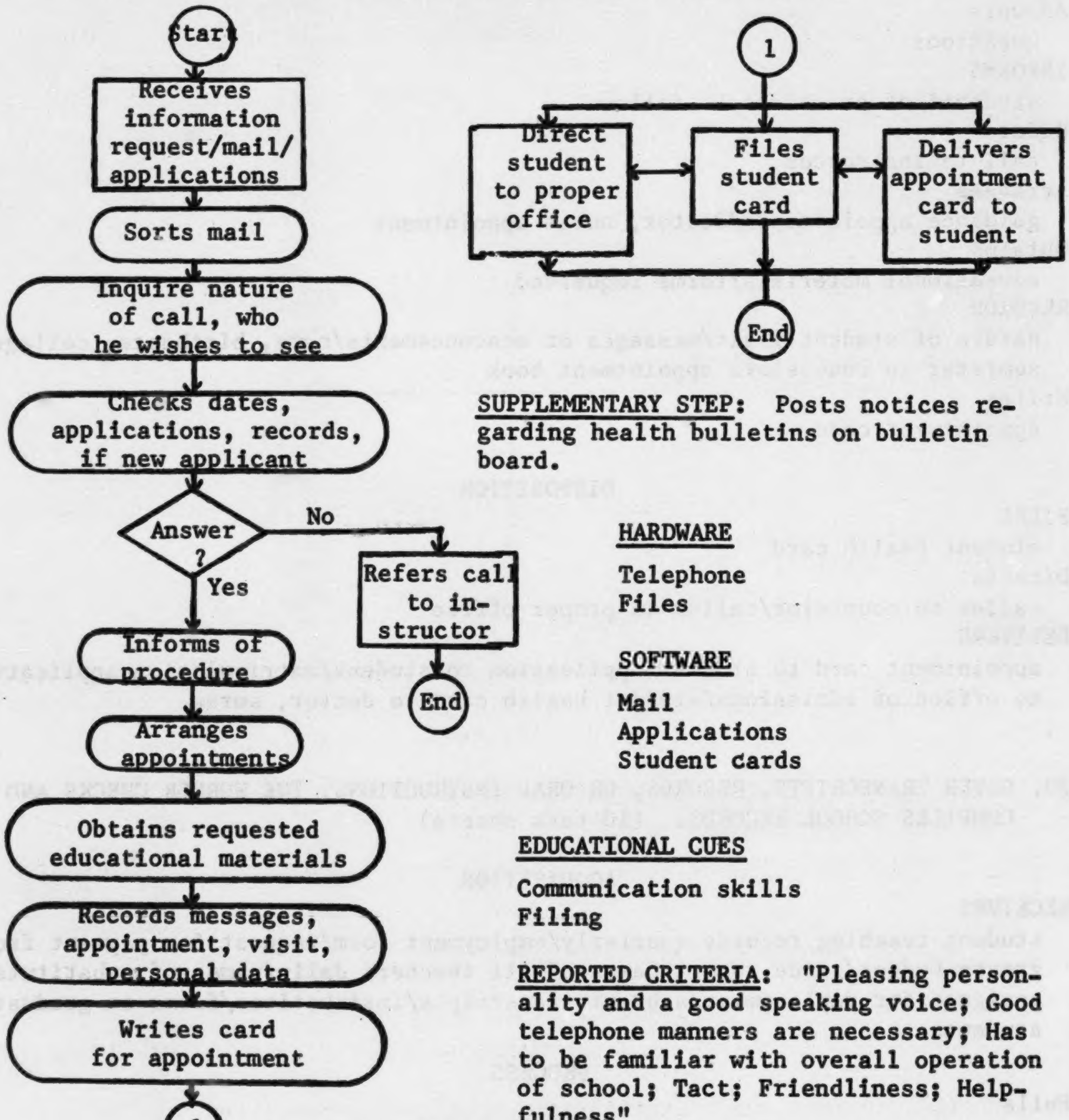
Receives cash box from student sellers/fee for ID card/checks/enrollment cash for fee

Checks list for fees owed/certification number of supervising teacher

Counts tickets sold/bus fare slips sold/cash

Computes supervising teacher's pay/total supervising teacher pay for city school system
Checks cash balance against items sold
Types information from checks to notification forms/fee receipt/list of supervisors and amount of pay for each system
Mails notification forms to students/lists of supervising teachers to State Department of Education
Delivers cash box and contents to school office/ID card to student/receipt to enrollee/fee to cashier
Files checks alphabetically

19. GIVEN TELEPHONE REQUESTS, MAIL, OR APPLICATIONS, THE WORKER PERFORMS TASKS OVER THE COUNTER OR BY TELEPHONE. (12 task sheets)


Start
Receives information request/mail/applications
Sorts mail
Inquire nature of call, who he wishes to see
Checks dates, applications, records, if new applicant
Answer ?
No
Yes
Refers call to instructor
End
Informs of procedure
Arranges appointments
Obtains requested educational materials
Records messages, appointment, visit, personal data
Writes card for appointment
1
1
Direct student to proper office
Files student card
Delivers appointment card to student
End

SUPPLEMENTARY STEP: Posts notices regarding health bulletins on bulletin board.

HARDWARE

Telephone
Files

SOFTWARE

Mail
Applications
Student cards

EDUCATIONAL CUES

Communication skills
Filing

REPORTED CRITERIA: "Pleasing personality and a good speaking voice; Good telephone manners are necessary; Has to be familiar with overall operation of school; Tact; Friendliness; Helpfulness"

ACQUISITION

RECEIVES
telephone request for information on materials/telephone call/caller/ application for matriculation/mail

PROCESS

SORTS
mail

Inquires
whom caller wishes to see/nature of call

CHECKS
whether or not new applicant/counselors' calendar/dates with counselor/ matriculation application/student health record

Answers
questions

INFORMS
students of procedure to follow

Refers
call to instructor

Arranges
guidance appointments/doctor, nurse appointment

Obtains
educational materials/forms requested

RECORDS
nature of student visit/messages or announcements/name, birthdate, college semester in counselors appointment book

Writes
appointment card

DISPOSITION

FILES
student health card

Directs
caller to counselor/caller to proper office

DELIVERS
appointment card to student/application to student/matriculation application to office of admissions/student health card to doctor, nurse

20. GIVEN TRANSCRIPTS, RECORDS, OR ORAL INSTRUCTIONS, THE WORKER CHECKS AND COMPILES SCHOOL RECORDS. (10 task sheets)

ACQUISITION

RECEIVES
student teaching records quarterly/employment form/request for payment from grants budget/grade report/names of ill teachers daily/names of substitutes assigned for replacement/student transcripts/instructions/forms on graduate students

PROCESS

Pulls
approved grants register sheet/visiting professor housing list

SORTS
  teaching placement by teaching fields/requisition for grants numerically/ grade reports/transcripts alphabetically
CHECKS
  biography of employee for previous university employment/requisitions for grants for approval signature, time limit/student folder for completeness/ if still interested in renting
CALLS
  each person on housing list
RECORDS
  master list/tentative list of student teacher placement with supervising teacher/schedule of courses to employment form
TYPES
  employment forms/new housing list/duplicating order/copy of registration schedule
Proofreads
  all typewritten materials
COMPILES
  folder for employee/permanent record
Writes
  initials approving payment/schedules for substitute/list of available graduate students
Assigns
  graduate students to registration duties
INFORMS
  graduate students of hours, place, day he works

DISPOSITION

Sends
  grade report to Dean, department chairman/memo to department chairman for information on graduate students
MAILS
  master list of student teacher placement to college supervisor/grade reports to schools/housing lists
FILES
  master list of student teacher placement/transcripts in student folder/ housing lists
DELIVERS
  copy of employment forms to supervisor/approved grant requisition/ duplicating order to Duplicating/registration schedule to Dean

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Student records	Proofreading
Files	Student/housing lists	Checking
	Teaching schedules	Accuracy
		Typing
		Filing

REPORTED CRITERIA: "Accurate evaluation of all requests for payment from grants budget; Thoroughness"

21. GIVEN STUDENT WORKERS, THE WORKER CHECKS THEIR TYPEWRITTEN WORK. (1 task sheet)

Receives student work
Checks record for correctness
Explains mistakes/any violations of procedures/rules
Instructs student how to make corrections
Checks final work
Obtains supervisor's approval
Files records
Mails materials to Board of Education

22. GIVEN PERSONNEL LISTS, THE WORKER SENDS APPLICATION FORMS TO SCHOOLS HAVING SPECIAL LEARNING DISABILITY PROGRAMS AND PROCESSES RETURNED APPLICATIONS. (1 task sheet)

Obtains personnel listing of teachers of Special Learning Disability (SLD) programs from SLD programs book
Sends application forms to schools
Receives completed applications
Writes in preliminary report that application has been received
Sorts applications numerically by teacher certificate number
Pulls teacher teaching certificate
Writes type of certificate and expiration date on application
Files teacher certificate
Screens application circling questionable items
Obtains approval of application from supervisor
Places original copy in SLD book
Files class list of students enrolled in SLD program
Mails copy of list to school district

23. GIVEN SOLICITOR, THE WORKER ISSUES PERMITS TO SOLICIT STUDENTS FOR EDUCATIONAL COURSES IN PRIVATE TRADE SCHOOLS. (1 task sheet)

24. GIVEN REQUESTS FOR LECTURERS, THE WORKER PROCESSES INQUIRIES AND CLEARS DATES FOR SPEAKERS AT VARIOUS UNIVERSITIES. (1 task sheet)

Receives requests for lecturers
Records request and institution, speaker requested, suggested dates
Obtains signature of supervisor on request
Types form to requested speaker
Mails form to speaker
Receives form from speaker with preferred dates
Checks logbook for any other lecturer from this university at that same university on that date
Types form letter to person requesting lecturer
Proofreads form letter
Obtains signature of supervisor
Mails letter
Receives letter from requesting university confirming date

Records confirming date in logbook
Files all materials by name of requesting university

25. GIVEN REQUESTS FROM PROFESSORS WANTING TO STUDY AT THIS UNIVERSITY, THE WORKER HANDLES CONTRACTS TO HELP PAY THEIR EXPENSES. (1 task sheet)

Receives study request
Date stamps professor's request
Pulls professor's file
Calls persons professor wants to see while here
Arranges motel accommodations
Records arrangements on application
Types contract, pass, and travel card
Files copies of contract, pass and travel card, and copy of form letter in professor's folder
Types form letter for travel authorization
Obtains supervisor's signature
Records contract number

EDUCATION CRITICAL INCIDENTS

"When we were getting ready for the annual education conference this year, the worker did a lot of the preparation for it herself without receiving any instructions from me to do so. She keeps a list of the things needed and used from previous years and uses her initiative to do the planning she knows has to be done."

"The worker typed a manuscript and caught an error in a quotation. This manuscript was being prepared in final form and was to be circulated as teacher resource information."

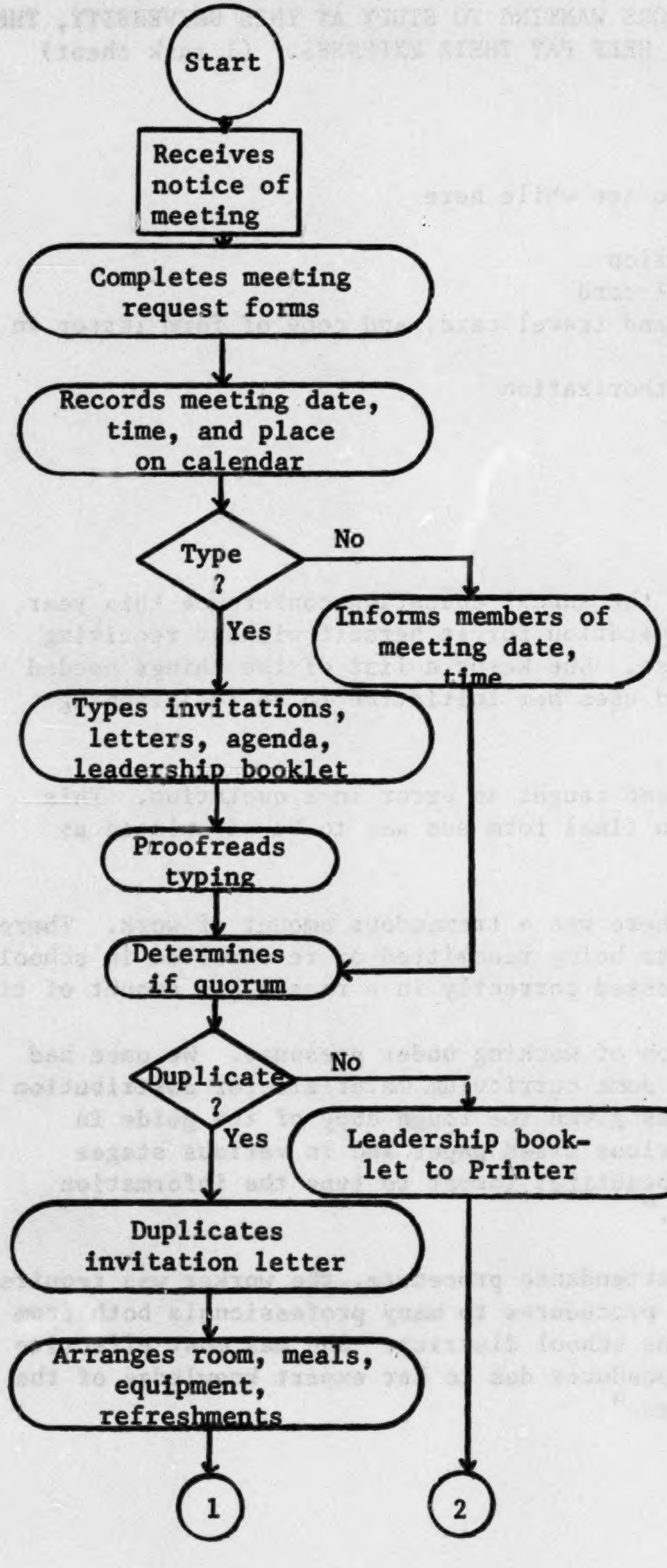
"During September and October there was a tremendous amount of work. There were over 2,500 cards of students being readmitted or re-enrolled in schools. She got all of these cards processed correctly in a reasonable amount of time."

"The worker does an excellent job of working under pressure. We once had a deadline to meet in preparing some curriculum materials for distribution at a teachers' workshop. She was given the rough copy of the guide in several different batches on various sized paper and in various stages of legibility. She designed a beautiful format to type the information and finished it by the deadline."

"In initiating an entirely new attendance procedure, the worker was required to demonstrate the hardware and procedures to many professionals both from within the school and without the school district. She was most effective explaining the equipment and procedures due to her expert knowledge of the equipment and her basic job tasks."

8.4 CLIENT RELATED, CONFERENCES AND MEETINGS

26. GIVEN ORAL OR WRITTEN NOTICE OF MEETING, THE WORKER ARRANGES CONFERENCES AND MEETINGS. (11 task sheets)


Start
Receives notice of meeting
Completes meeting request forms
Records meeting date, time, and place on calendar
Type ?
No
Yes
Informs members of meeting date, time
Types invitations, letters, agenda, leadership booklet
Proofreads typing
Determines if quorum
Duplicate ?
No
Yes
Leadership booklet to Printer
Duplicates invitation letter
Arranges room, meals, equipment, refreshments
1
2

HARDWARE

Typewriter
Files
Telephone

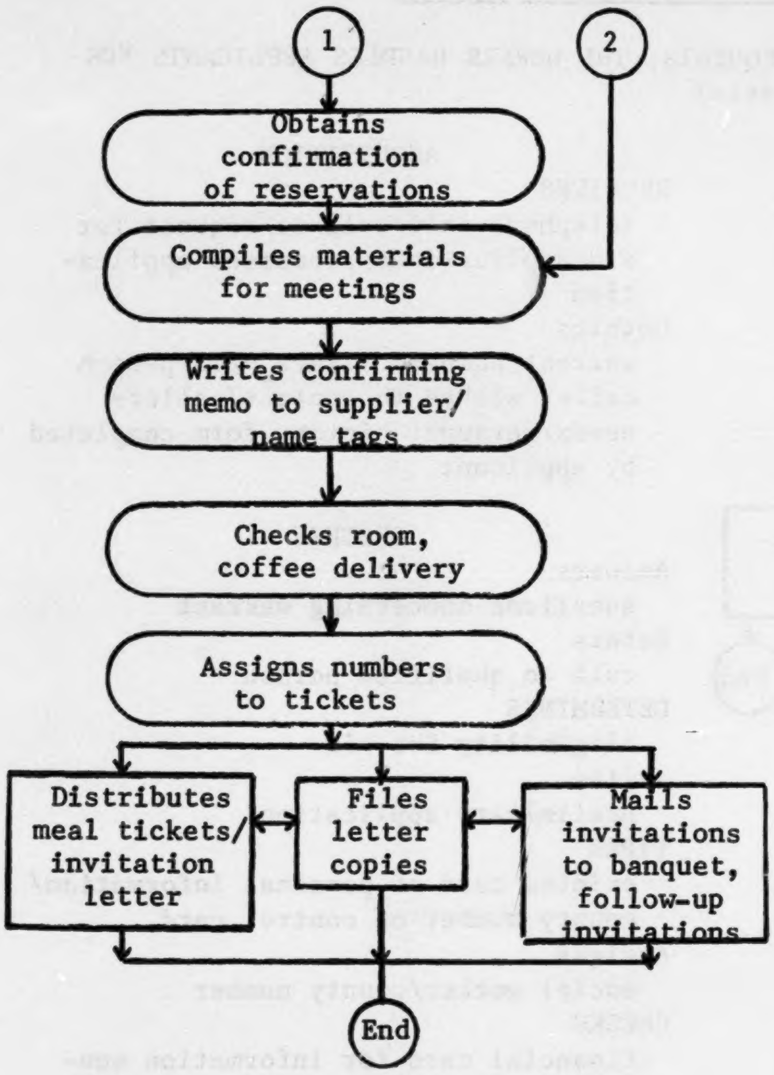
SOFTWARE

Desk calendar
Leadership booklet
Name tags
Tickets
Invitations

EDUCATIONAL CUES

Typing
Filing
Communication skills
Checking

REPORTED CRITERIA: "All members are notified; High level ability to communicate effectively; Confirmed reservations; Careful about attention to details; Follow through on numerous details; Pressure work"


1
2
Obtains confirmation of reservations
Compiles materials for meetings
Writes confirming memo to supplier/ name tags
Checks room, coffee delivery
Assigns numbers to tickets
Distributes meal tickets/ invitation letter
Files letter copies
Mails invitations to banquet, follow-up invitations
End

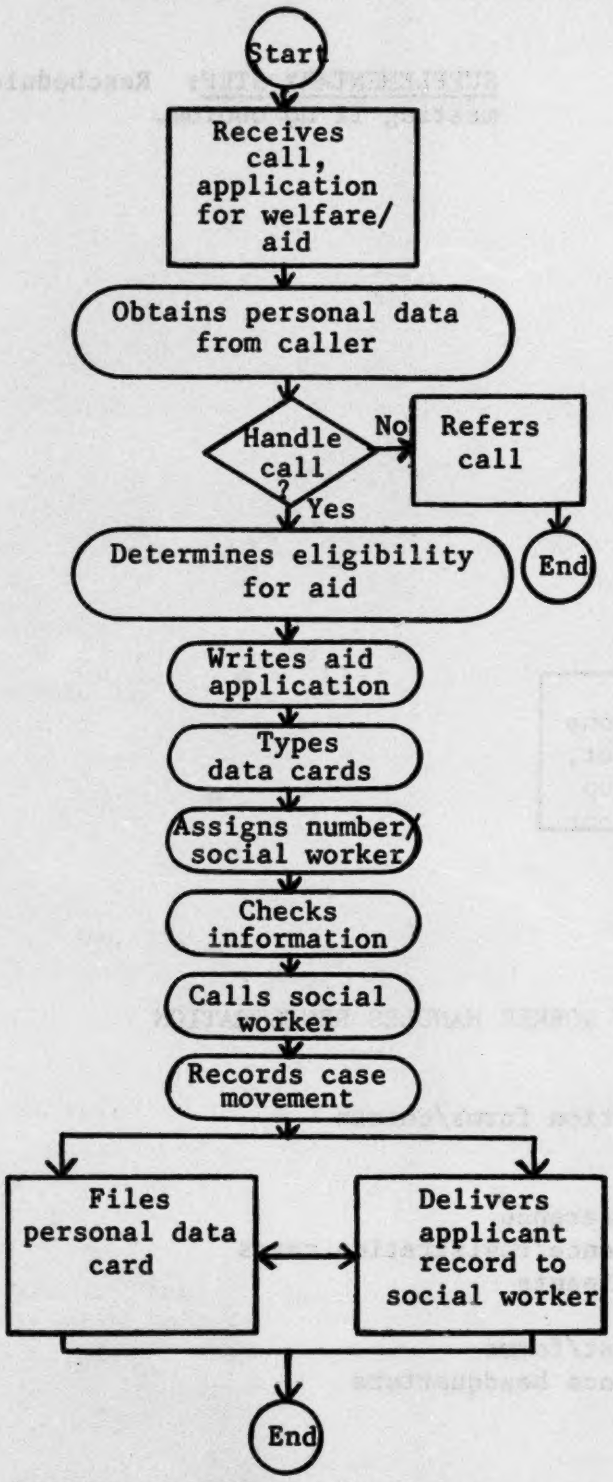
SUPPLEMENTARY STEP: Reschedule meeting if no quorum.

27. GIVEN CONFERENCE PARTICIPANTS, THE WORKER HANDLES REGISTRATION PROCEDURES. (2 task sheets)

Receives participant/completed registration forms/checks
Obtains participant name
Checks check for correctness
Sorts checks, registration forms by conference
Types registration list for each conference/registration cards
Delivers name badge/materials to participants
Directs participants to meeting room
Files registration card/registration list/forms
Mails check and receipt copy to conference headquarters

8.5 CLIENT RELATED, WELFARE AND AID

28. GIVEN APPLICATIONS OR ORAL REQUESTS, THE WORKER HANDLES APPLICANTS FOR WELFARE AND AID. (5 task sheets)


Start
Receives call, application for welfare/aid
Obtains personal data from caller
Handle call?
No
Refers call
End
Yes
Determines eligibility for aid
Writes aid application
Types data cards
Assigns number/social worker
Checks information
Calls social worker
Records case movement
Files personal data card
Delivers applicant record to social worker
End

REPORTED CRITERIA: "Must understand how to use appropriations book to locate information; Ability to communicate with people; Some degree of pressure dealing with anxious people"

ACQUISITION

RECEIVES
telephone call/callers/request for aid/applications/processed application
Obtains
warrant number/callers name/person caller wishes to contact/callers needs/personal history form completed by applicant

PROCESS

Answers
questions concerning warrant
Refers
call to qualified person
DETERMINES
eligibility for aid
Writes
preliminary application
TYPES
printed card of personal information/county number on control card
Assigns
social worker/county number
CHECKS
financial card for information concerning moves, district location, change of name or address, deceased
CALLS
social worker
Requests
presence of social worker
RECORDS
case movement on control card

DISPOSITION

FILES
personal information card
DELIVERS
preliminary, processed application to social worker/application to opening desk

SUPPLEMENTARY STEP: Calls welfare client requesting/giving information

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Telephone	Warrant	Communication skills
Typewriter	Financial card	Accuracy
Files	Personal information card	Typing
		Filing
		Social services terminology

29. GIVEN BILLS AND RECEIPTS, THE WORKER PROCESSES WELFARE AND AID CLAIMS FOR PAYMENT. (8 task sheets)

ACQUISITION

RECEIVES

vendor bills/disbursement sheet/cash-aid receipts/warrant copy/repayment forms

PROCESS

Pulls

unpaid bills folder/collection card/money card

CHECKS

collection card with repayment forms/money card with collection card/case number on bill with client master book for eligibility/whether doctor is a specialist, general practitioner with rate sheet to see if rate is correct/amount of bus tokens requested by each district/type of aid to be charged/cash-aid receipts

SORTS

cash-aid receipts/repayment forms

DETERMINES

amount of money client has/client's unmet needs/names of social workers assigned to case/whether to send money to client or hold at county

Codes

budget documents

COMPUTES

amount needed from contribution/difference in excess of need to be retained by county/number of bus tokens requested/balance of bus tokens sent daily/totals of cash-aid receipts

TYPES

claims information on form/request for adjustment

RECORDS

information on collection card/number bus tokens requested/district number, amount on car fare cash-aid receipts/information from money, collection card

Posts

bus token balances to ledger/amount of money to collection card

Attaches

repayment form to collection card

DISPOSITION

Sends

collection card, repayment forms to typist/coded budget documents to Teletyping

Places
bills in stack for coding/bus tokens in envelopes
DELIVERS
accounting sheets to Accounting when bus tokens total reaches 20,000/cash-aid claims to Data Processing/budget document copies to Main Accounting/repayment forms to typist/request for adjustment to social worker/car fare cash-aid receipts to co-worker
FILES
cash-aid claims/collection cards/money cards

SUPPLEMENTARY STEP: Duplicates coded budget document

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Adding machine	Welfare/aid documents	Computational skills
Typewriter		Typing
Files		Filing
		Coding skills
		Social services terminology

REPORTED CRITERIA: "Not to assume doctors bill is correct and ask questions on each bill received; Must be sure computations are correct; Bookkeeping ability; Ability to keep sets of records; Understand coding; Knowledge of types of aid"

WELFARE AND AID CRITICAL INCIDENTS

"The worker received a claim last week with a question of allowability. She searched carefully through various channels until she came up with the correct answer and the proper code to fill out her form. She is extremely patient and will painstakingly check into all details the first time without having someone else tell her to do so."

"This worker does not like changes in routine. When the order came in to change the form of sending claims; namely, to send them in duplicate, she managed to forget and this created many problems and delays."

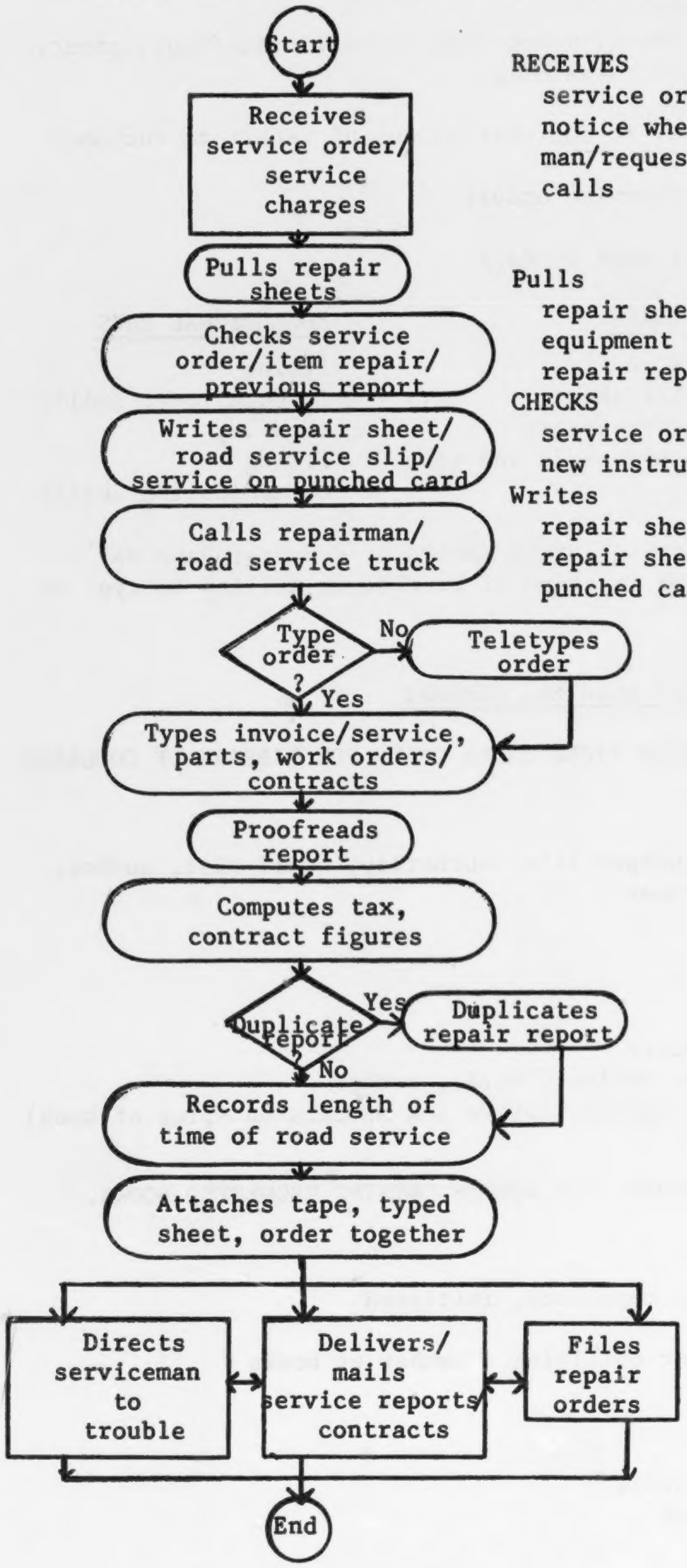
"The worker sent applicants for welfare to the wrong district because she read the maps incorrectly. The borders are subject to frequent change, but she does not make the changes when they cross her desk."

"One client demanded immediate attention. The worker very calmly seated him and proceeded with the task of processing the case. She spoke quietly and slowly and completely gained the confidence of the client."

"The county had lost Federal money, and it was very important to the people concerned that all the facts be related in the report the worker was preparing. She did not miss a detail; and in addition, she supported questionable figures with the facts that made them appear questionable when in reality they were quite realistic."

8.6 CLIENT RELATED, REPAIR SERVICE

30. GIVEN SERVICE ORDERS AND CHARGES, THE WORKER TYPES CONTRACTS, SERVICE ORDERS, AND REPAIR REPORTS. (13 task sheets)


Start
Receives service order/ service charges
Pulls repair sheets
Checks service order/item repair/ previous report
Writes repair sheet/ road service slip/ service on punched card
Calls repairman/ road service truck
Type order ?
No
Teletypes order
Yes
Types invoice/service, parts, work orders/ contracts
Proofreads report
Computes tax, contract figures
Duplicate report ?
Yes
Duplicates repair report
No
Records length of time of road service
Attaches tape, typed sheet, order together
Directs serviceman to trouble
Delivers/ mails service reports/ contracts
Files repair orders
End

ACQUISITION

RECEIVES
service order/service charges/serviceman notice when repair is completed/serviceman/request to order parts/road service calls

PROCESS

Pulls
repair sheet/punched card for office equipment requiring service/previous repair report

CHECKS
service order/previous report for shipped, new instruments/status of item repair

Writes
repair sheet/date repair completed on repair sheet/reason, date of service on punched card/customer name, number, problem, location of breakdown, road service slip/ meter number and date installed/customer regarding status of item repair

CALLS
repairman/road service truck

TYPES
invoice for service order/ service charges, parts on invoice/totals/work orders/ service orders/contracts/ updated repair report

(Teletypes)
order

Proofreads
report

Obtains
additions to repair report from Repairing

COMPUTES
tax/contract figures

DUPLICATES
repair report

RECORDS
length of time of road service

Attaches
punched tape, typed sheet, and order together

DISPOSITION

Directs
service man to department requesting service
DELIVERS
repair report copies/service order invoice copy to serviceman/tape, sheet, and order to supervisor/contract to salesman
MAILS
copy of invoice as customer bill to customer/status of repair to customer
FILES
repair sheet/road service slip/service orders
Places
copy of repair report in repair book by date

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Invoice	Typing
Teletype	Repair sheet	Computational skills
Files	Service orders	Accuracy
Calculator	Punched cards and tapes	Filing
Duplicator		Communication skills

REPORTED CRITERIA: "Prompt repair; Accurate record of repairs; Same day's service; Necessary to record exact location of breakdown; Ability to type on lines is helpful"

8.7 CLIENT RELATED, LIBRARY

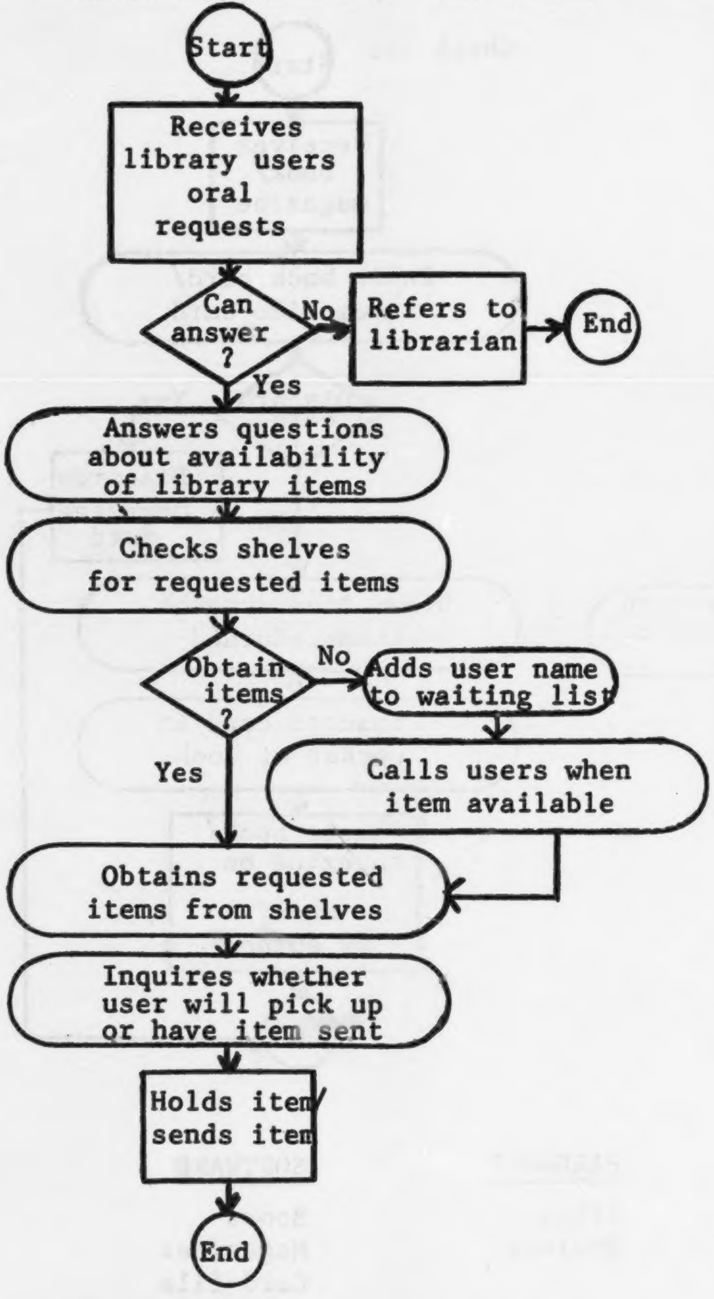
31. GIVEN SETS OF CARDS, THE WORKER TYPES INDEX CARDS FOR LIBRARY OF CONGRESS BOOKS. (1 task sheet)

Receives sets of cards
Types sets of cards identifying proper file, authority, shelf list, author, title, subject/card, pocket for book
Adds subjects to cards
Pastes pocket in book
Inserts book card in pocket
Shelves books
Calls user if new item was requested
Files cards in card catalog under subject, title, author
Sends new books to librarian for spining (white ink numbers on spine of book)

32. GIVEN CALL SLIPS TO LOCATE BOOKS, THE WORKER OBTAINS REQUESTED BOOKS. (2 task sheets)

Receives call slips
Checks if call slips are properly completed, initialed
Sorts call slips by tier
Determines route through tiers for obtaining a number of books
Locates books
Pulls books from shelves
Places books on hand truck
Arranges books in Dewey Decimal order
Delivers books to librarian's desk

33. GIVEN LIBRARY USERS' ORAL REQUESTS, THE WORKER ASSISTS USERS IN OBTAINING MATERIALS/BOOKS. (1 task sheet)


Start
Receives library users oral requests
Can answer ?
No
Refers to librarian
End
Yes
Answers questions about availability of library items
Checks shelves for requested items
Obtain items ?
No
Adds user name to waiting list
Calls users when item available
Yes
Obtains requested items from shelves
Inquires whether user will pick up or have item sent
Holds item/ sends item
End

Note: Hardware, Software and Educational Cues listed below refer to Performance Goals 2 and 3.

HARDWARE

Hand truck
Telephone
Shelves

SOFTWARE

Call slips
Books
Library items
Waiting list
Card catalog

EDUCATIONAL CUES

Dewey Decimal System organization of library, call number system
Communication skills

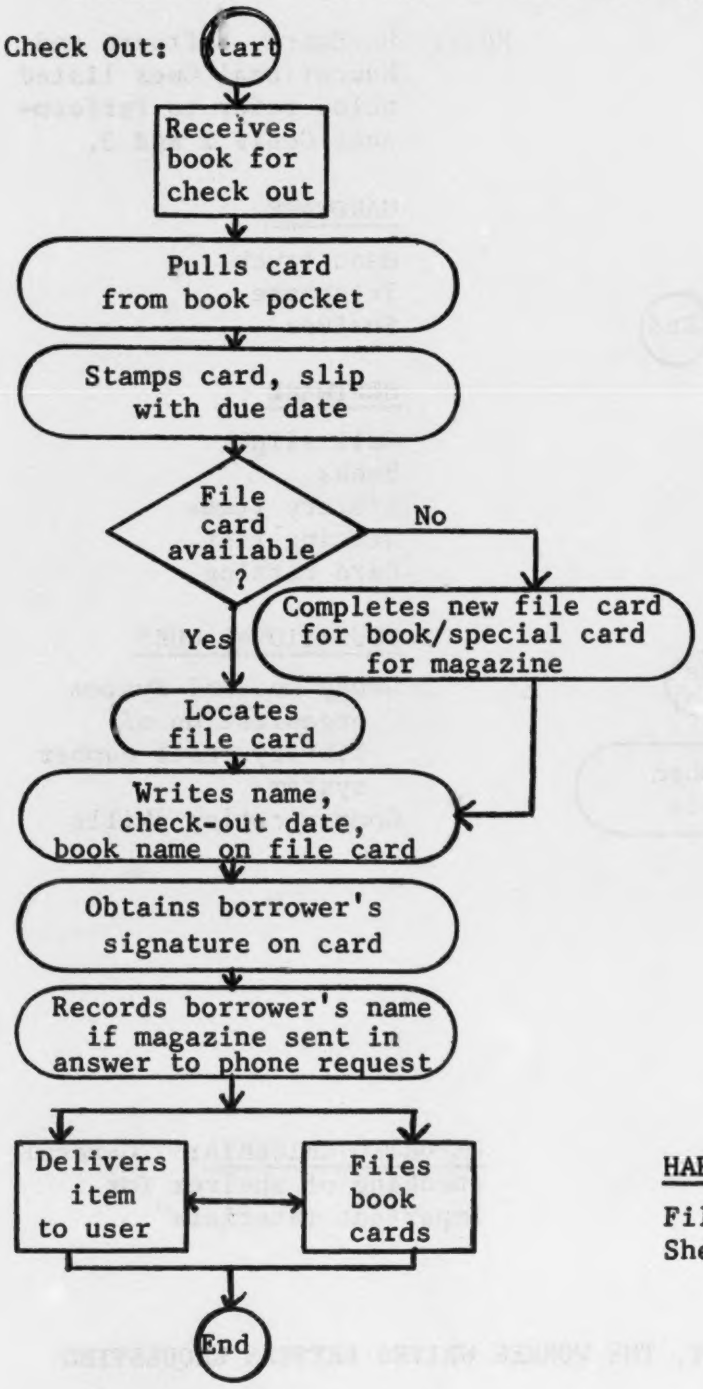
REPORTED CRITERIA: "Careful checking of shelves for important materials"

34. GIVEN INTER-LIBRARY LOAN REQUEST, THE WORKER WRITES LETTERS REQUESTING LOAN ITEMS. (1 task sheet)

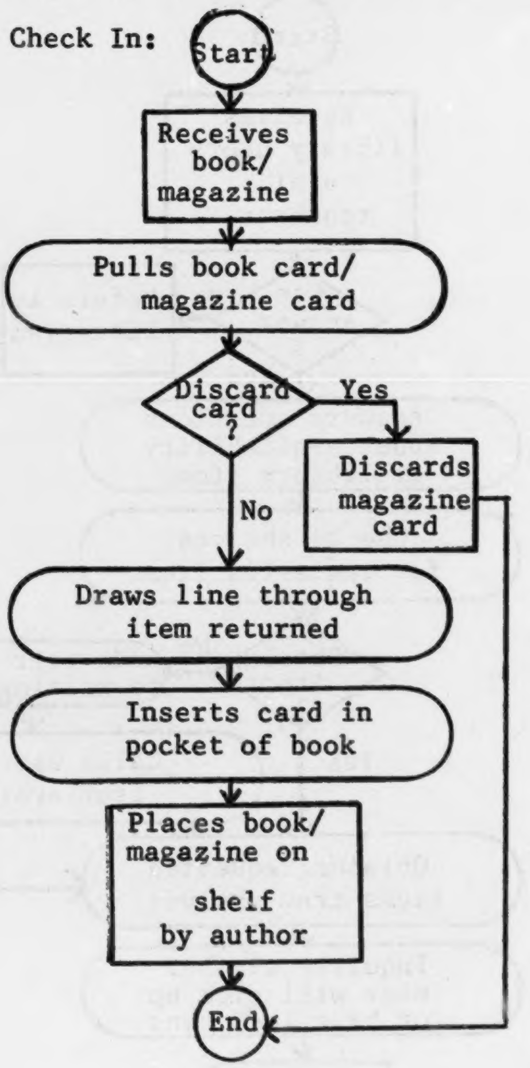
Receives inter-library loan request
Types form/composed letter
Obtains librarian's signature
Mails letter to person requesting loan

35. GIVEN BOOKS FOR CHECK OUT/CHECK IN, THE WORKER PERFORMS TASKS REQUIRED TO CHECK OUT/IN ITEMS FOR THE LIBRARY. (3 task sheets)

Check Out:


Start
Receives book for check out
Pulls card from book pocket
Stamps card, slip with due date
File card available ?
No
Completes new file card for book/special card for magazine
Yes
Locates file card
Writes name, check-out date, book name on file card
Obtains borrower's signature on card
Records borrower's name if magazine sent in answer to phone request
Delivers item to user
Files book cards
End

Check In:


Start
Receives book/ magazine
Pulls book card/ magazine card
Discard card ?
Yes
Discards magazine card
No
Draws line through item returned
Inserts card in pocket of book
Places book/ magazine on shelf by author
End

HARDWARE

Files
Shelves

SOFTWARE

Books
Magazines
Card file
Book card, book card pocket

EDUCATIONAL CUES

Filing
Library procedures/terminology

REPORTED CRITERIA: "Shelves are kept neat; Daily 20-50 books checked out"

8.8 CLIENT RELATED, INSURANCE

36. GIVEN POLICIES, APPLICATIONS, AND CONTRACTS, THE WORKER TYPES BINDERS, POLICIES, RENEWALS, CHANGES, AND TRANSFERS FOR INSURANCE. (48 task sheets)

ACQUISITION

RECEIVES
policy illustrations form/request from agent for policy program/request for binder/policy/renewal cards/work sheets/copies of applications/copy of contracts/request for change/transfer of policy/mailing kit of insurance materials/dictated belt/rough draft of policy/quote request/payment cards/change orders/cancellation notice from customer

PROCESS

Pulls
insured's folder/pending folders for applicant/contracts/expiration cards/coupon/check accounting card

SORTS
policies/expiration cards

CHECKS
policy/appraisal of item to be insured for adequate description/policy work sheet for completeness/instructions/coding, classifications on policy/state, city codes for fire departments/completed policies for details/expiration cards/if loans due on transfers policy

Assigns
policy number, chart number to application

DETERMINES
premium/new amount of insurance/type of endorsements necessary/necessary changes/included protection/district policy should be in on transfer/agent transfer is assigned to

Collects
data on annual dividend, cash value, increase by year of cash value, premium, cost price per year, gain/money from customer

COMPILES
customer file

Stamps
policy forms/transfers with branch clearing house stamp

COMPUTES
premium, totals/insurance costs/pemium change

Adjusts
payment schedule

Writes
paid receipt/loan change order/application for policy/premium on work sheet/code number on application for medical center/endorsement form with changes

TYPES
illustration, agents form/policy program/synopsis of benefits form/insurance binder form/dictated policy information/corrected policy/policy form/invoice/name, address on endorsement/policy endorsement form/statement of new payment schedule/fluid process master of endorsements/contract/beneficiary change/information card/form letter/reinstatement form letters

Obtains
approval of typed policy, signature on policy

Proofreads
policies

Arranges
  illustration form, cover letter, agents form and explanation sheets in binder
Attaches
  work sheet and policy
RECORDS
  accumulated data on work sheet/customer name by next number in binder book/policy and chart numbers/policy changes/premium increase or decrease on ledger sheets

DISPOSITION

FILES
  binder copy/old and new policies/customer file/invoice copy/endorsements/renewal cards/ work sheet/contracts/kit/reinstatement form letters/copy of ledger sheet
(Destroys)
  all materials over five years old
DELIVERS
  synopsis forms to agent for customer/binder and receipt to customer/policy to supervisor/policy to reviewer in Data Processing/policy original, copy to underwriter/endorsements/information card to agent
Sends
  program to agent/policy to Rating/loan change order to supervisor, Accounting/change to Addressing/copy of ledger sheet to home office
MAILS
  copy of program to home office/binder copies to main company/policies, payment card to customer/policy, invoice to customer/endorsements, pay schedule to home office/contract to home office/transfer policy/kit letters one at a time until gone/reinstatement form letter

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Rate manuals, charts	Computational skills
Calculating machine	Binder book	Typing, statistical
Dictating machine	Dictation belt	Neatness
Files	Insurance policy forms	Filing
	Insurance payment cards	Checking
	Insurance policy endorsement forms	Coding
		Accuracy
	Renewal cards	Insurance terminology
	Ledger sheets	

REPORTED CRITERIA: "Knowledge and understanding of insurance plans/attention to detail in calculations; Speedy and accurate typing; Use rate books; Completely accurate transcript expected/perfect copy; Speed and accuracy with no erasures permitted; Careful attention; Knowledge of insurance terms"

37. GIVEN CLAIMS OR ORAL INQUIRY, THE WORKER PROCESSES INSURANCE CLAIMS. (20 task sheets)

ACQUISITION

- RECEIVES
  - telephone call about accident/claim cards/claim correspondence/approved hostpital list/claims jacket/check certification requests

PROCESS

- Pulls
  - beneficiary's folder
- SORTS
  - claims alphabetically
- (Evaluates)
  - claims
- Locates
  - claim card by color code/files
- CHECKS
  - billing of claims/contract/treatment date/doctor's sheet/information received/forms completed/signature on claim cards/logs for following day's schedule/claim/correspondence/approved hospital list/benefits
- COMPUTES
  - maximum benefits payable under group contract/amount of claim
- DETERMINES
  - follow-up for claims/benefits not payable/if claimant is covered/to whom check will be sent
- Writes
  - new claim information on accident or loss form/check order form
- TYPES
  - claims processing form and coding
- (Refuses)
  - claims

DISPOSITION

- Places
  - check certification requests in claims jacket
- FILES
  - accident/loss form/claims processing form/claims in pending file/claims jacket
- DELIVERS
  - folder to supervisor/claim cards to interviewer/statement of claims and hospital form to claimant/instructions to typist to type refusal letter/claim/claimant form to manager
- MAILS
  - check for claim

SUPPLEMENTARY STEPS: Color codes claim jacket; Date stamps mail

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Telephone	Accident or loss form	Communication skills
Files	Claim cards	Filing, alphabetically
Typewriter	Check order forms	Accuracy
	Claims forms	Checking
	Checks	Typing
		Computational skills
		Insurance terminology

REPORTED CRITERIA: "Good command of color coding; Read and interpret logs; Accuracy important; Excellent reading ability with legal documents; Some general knowledge of insurance"

38. GIVEN CLAIMS FORMS, THE WORKER DUPLICATES CLAIM STICKERS FOR INSURANCE POLICY HOLDERS. (1 task sheet)

Receives claims forms
Stamps date on claims
Sorts claims alphabetically
Pulls claimant's data card, claim card
Duplicates claim sticker using photocopy machine
Writes claimant's name, number, and date on new claim card
Files claim card, data card
Clips new claim card, claim sticker to form received
Sorts claims into three groups
Distributes claims to other workers
Files claims

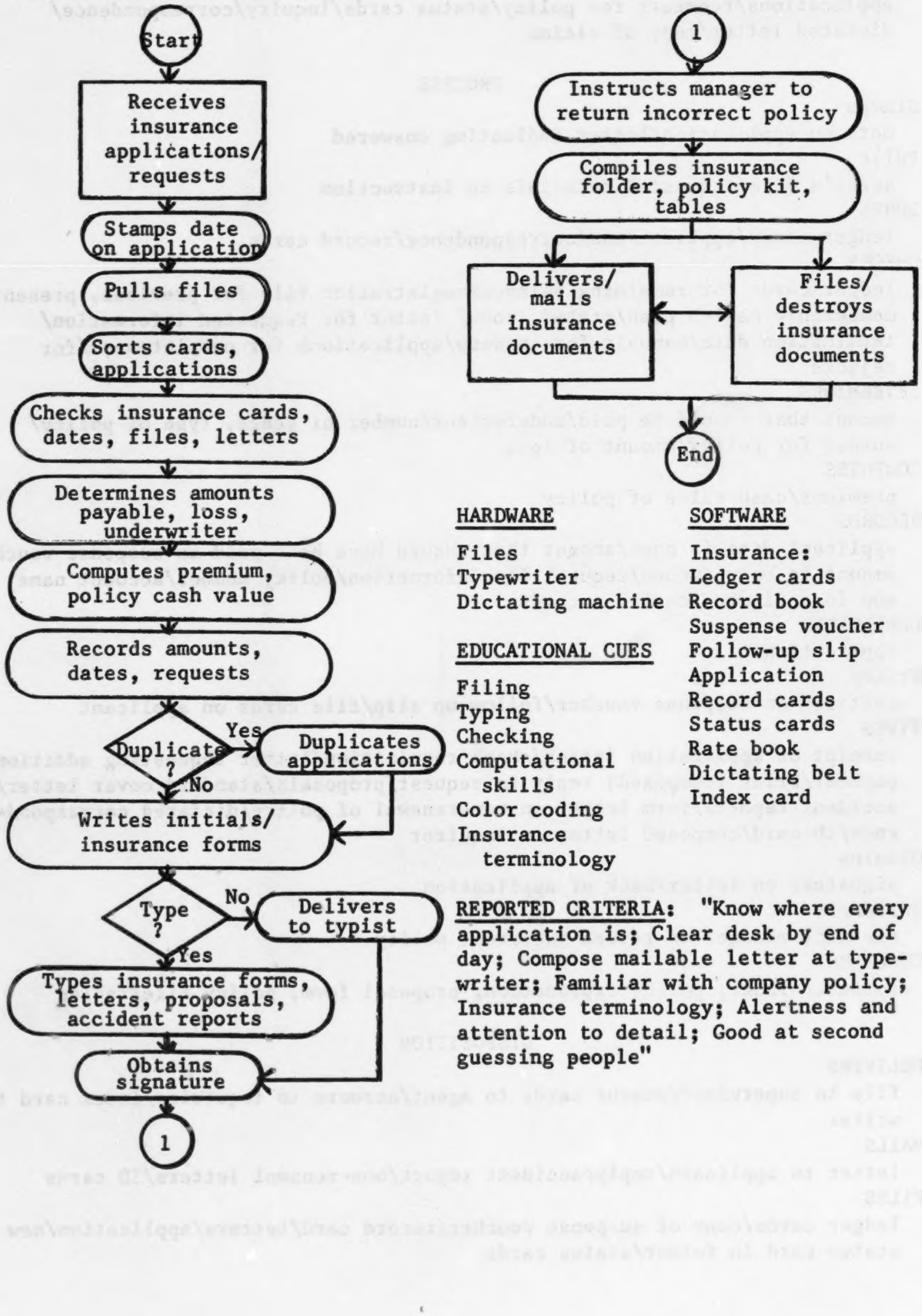
39. GIVEN A REQUEST FOR MEMBERSHIP, THE WORKER DISTRIBUTES AND PROCESSES AUTO CLUB MEMBERSHIP APPLICATIONS. (1 task sheet)

Receives request for membership application
Delivers applications
Assigns next membership number
Types membership card and insurance card
Issues new member bumper sticker, reward sticker, general information booklet on services available, welcome letter from club to new member
Receives check for membership dues
Files membership application numerically, by last name

40. GIVEN UNDERWRITER INFORMATION, THE WORKER PREPARES DAILY, WEEKLY, MONTHLY REPORT OF NEW BUSINESS ACTIVITY. (2 task sheets)

Counts applications
Obtains computer printout
Checks deletions, declinations, and corrections
Sends copies of deletions to Order Accounting
Codes information for Keypunching
Obtains material for report from Order Accounting
Collects reports daily
Computes percentages
Writes report
Checks totals against another's figures
Delivers to secretary to type
Delivers to supervisor for approval

41. GIVEN INSURANCE LEDGER CARDS, APPLICATIONS/REQUESTS FOR POLICY, THE WORKER CHECKS, COMPUTES, FILES RECORDS AND ANSWERS ENQUIRIES REGARDING INSURANCE. (41 task sheets)


Start
Receives insurance applications/ requests
Stamps date on application
Pulls files
Sorts cards, applications
Checks insurance cards, dates, files, letters
Determines amounts payable, loss, underwriter
Computes premium, policy cash value
Records amounts, dates, requests
Duplicate ?
Yes
Duplicates applications
No
Writes initials/ insurance forms
Type ?
No
Delivers to typist
Yes
Types insurance forms, letters, proposals, accident reports
Obtains signature
1
1
Instructs manager to return incorrect policy
Compiles insurance folder, policy kit, tables
Delivers/ mails insurance documents
Files/ destroys insurance documents
End

HARDWARE

Files
Typewriter
Dictating machine

EDUCATIONAL CUES

Filing
Typing
Checking
Computational skills
Color coding
Insurance terminology

SOFTWARE

Insurance:
Ledger cards
Record book
Suspense voucher
Follow-up slip
Application
Record cards
Status cards
Rate book
Dictating belt
Index card

REPORTED CRITERIA: "Know where every application is; Clear desk by end of day; Compose mailable letter at typewriter; Familiar with company policy; Insurance terminology; Alertness and attention to detail; Good at second guessing people"

ACQUISITION

RECEIVES
ledger card/health plan application/record cards/policyholder's file/ applications/requests for policy/status cards/inquiry/correspondence/ dictated letter/copy of claims

PROCESS

Stamps
date on application/letter indicating answered
Pulls
agent's file/requested materials on instruction
SORTS
ledger cards/applications/correspondence/record cards
CHECKS
ledger cards for remaining balance/registration file for previous, present membership health plan/status, code/ letter for requested information/ termination date/manuals for answers/applications for completeness/for rejects
DETERMINES
amount that should be paid/underwriter/number of years, type of policy/ number for policy/amount of loss
COMPUTES
premiums/cash value of policy
RECORDS
applicant data in book/amount that should have been paid on suspense voucher/ amount to be refunded/request for information/policy number/account name and loss figures on index cards
DUPLICATES
applications
Writes
initials on suspense voucher/follow-up slip/file cards on applicant
TYPES
receipt of application letter/check requisition/letter requesting additional payment/brief (composed) reply to request/proposals/standard cover letter/ accident reports/form letter on non-renewal of policy/dictated correspondence/ID card/composed letter to inquirer
Obtains
signature on letter/back of application
Instructs
district manager to return incorrect policy
COMPILES
folders/binder, policy explanation, proposal form, policy file/tables

DISPOSITION

DELIVERS
file to supervisor/status cards to agent/answers to inquiries/index card to writer
MAILS
letter to applicatn/reply/accident report/non-renewal letters/ID cards
FILES
ledger cards/copy of suspense voucher/record card/letters/application/new status card in folder/status cards

Sends
  copy of application to Filing, Medical Section/suspense vouchers to Cashier/ application to underwriter
(Destroys)
  old status card

INSURANCE CRITICAL INCIDENT

"When asked by a new policy holder on which date the policy became effeceive, the worker replied ninety days instead of three months. The policy holder ran up a sizeable bill in the two days between the two intervals, and the company had to stand behind the answer the worker gave and were forced to pay."

8.9 CLIENT RELATED, OTHER FINANCIAL INSTITUTIONS

42. GIVEN MEMBERSHIP/LOAN APPLICATIONS, THE WORKER SERVES THE CUSTOMER IN A FINANCIAL INSTITUTION SUCH AS A CREDIT UNION. (11 task sheets)

ACQUISITION

RECEIVES
  completed membership card and 25 cent fee/contract and original application form/request for loan/home loan application/approval of loan payment from manager/check from cashier for customer loan

PROCESS

Writes
  account number on membership card/numbers on loan case and related papers
CHECKS
  home loan application/added loan application/savings amount balance
COMPUTES
  old and new loan principal/total principal and interest/number of months desired for repayment
DUPLICATES
  home loan application
Pulls
  share and loan ledger card
TYPES
  loan contract/application/final loan documents/savings withdrawal check
Requests
  client call or return in two hours/appraisal on home
Verifies
  employment/credit
Obtains
  signatrue on check
RECORDS
  membership fee and name in journal on share and loan ledger sheet/old loan balance on new loan application
Posts
  membership fee and member name in ledger
INFORMS
  client of amount he can borrow on signature only

DISPOSITION

MAILS
loan papers to buyer for signature
FILES
loan application/copy of check
DELIVERS
membership cards, membership fee to membership chairman/copy of loan contract to customer, to insurance company carrying mortgage/completed application form to manager/added loan application to credit committee/house loan application form to FHA or VA/credit application to Cashier/loan or savings check to customer

REPORTED CRITERIA: "Fees are properly posted; Complete accuracy"

HARDWARE

Typewriter
Files

SOFTWARE

Membership card
Cash
Share/loan ledger card
Contract
Application form
Interest chart

EDUCATIONAL CUES

Typing
Accuracy
Computational skills
Filing
Checking

43. GIVEN CUSTOMER ACCOUNTS, THE WORKER SOLICITS FROM RETAIL FIRMS PERMISSION TO GRANT 30-DAY CREDIT ACCOUNTS TO POTENTIAL CUSTOMERS. (1 task sheet)

OTHER FINANCIAL INSTITUTIONS CRITICAL INCIDENTS

"Day before yesterday the worker was sent out to repossess an auto. He recovered the auto from the gentlemen who asked him what he would do if he did not give up the car. Being a very knowledgeable person, the worker correctly replied that he would have to get the sheriff to repossess the car. Consequently, the man willingly gave the worker the car."

"She paid out $1,500 in funds on a forgery. If she had asked the customer to sign his name once again, in front of her, on the slip, the forgerer might have become nervous."

"In checking credit rating for a customer who was requesting a loan, the clearinghouse said the rating was "probable" (not enough information). The worker realized this meant that information on the client was not sufficient. If this lack of information had gone by her, the client may have been turned down for the loan or given a loan on the basis of insufficient information."

"She gathered loan information that meant the difference in the person qualifying for the FHA loan. She wants to be sure that the package is more than complete and that it makes a good case for the person seeking the loan."

8.10 CLIENT RELATED, MISCELLANEOUS SERVICES

44. GIVEN ORAL REQUESTS, THE WORKER HANDLES MISCELLANEOUS OVER-THE-COUNTER OR TELEPHONE INQUIRIES. (8 task sheets)

ACQUISITION

RECEIVES
telephone call/visitor's inquiry regarding Civil Service jobs/public utility customer/alien registration card, passport, last year's tax return/tax inquiry/money for license/request to rent a car

PROCESS

Writes
name of caller, telephone number/letter to obtain information/forms to turn on, off electrical service/tax clearance forms/contract information for car rental

CHECKS
name, district/reference material regarding disease-prevention and cure societies/files for job descriptions/records to answer billing questions/tax return for irregularities/tax law, regulations for Federal tax service/price of requested license (liquor, alcohol, or solicitors permits)

Obtains
completed license application/rental contract/customer signature on contract

Explains
about memorial contributions/if person eligible for Civil Service employment/alien should file amended return and pay balance immediately

TYPES
license/memo listing all licenses issued

RECORDS
name on memorial/license issue and pertinent data

COMPUTES
license fees received

Stamps
seal of agency on stub of tax form

INFORMS
taxpayer of findings, method to solve problems/car rental agency to bring car for customer

CALLS
party to give information located

DISPOSITION

Sends
memorial contribution information to proper district/job description for Civil Service to applicant

DELIVERS
job description to visitor/passport to alien/license to applicant/copy of memo of issued licenses to Cashier

FILES
copy of memo on license totals

REPORTED CRITERIA: "Diplomacy in dealing with public; Tact in handling customers, securing information; Accurate information, customer signature on contracts"

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Telephone	Licenses	Communication skills
Files	Memorial cards	Filing
Typewriter	Rental contracts	Typing
	Tax booklets	Computational skills
	Services manuals	Checking

45. GIVEN TRAFFIC TICKETS, ACTIVITY REPORTS, AND PRESS CLIPPINGS, THE WORKER CHECKS AND RECORDS MISCELLANEOUS ITEMS. (10 task sheets)

ACQUISITION

RECEIVES
traffic ticket/cashiers daily activity reports/tax cases/press clippings/investigation reports to determine tax delinquency/inmates drafts

PROCESS

Pulls
driver's record

SORTS
activity reports by type of action/by area/alphabetically/reports by region/press clippings/traffic tickets

CHECKS
information on report with attached documents/legal documents for completeness, signature of notary public/taxpayer information

COMPILES
monthly press clipping report

Writes
price of policy on report cover sheet/statistical information on coded cards

TYPES
name tag for each report recipient/violation or payment notation on driver's record card

DUPLICATES
legal documents

(Assembles)
summary report

Inserts
name tag in summary report

Stamps
inmate's number on draft

DISPOSITION

Distributes
documents to work areas/copies of inmate drafts to hospital, service units

DELIVERS
reports with name tags to Mailing/report to supervisor/tax case, coded card/paid traffic tickets to vault

FILES
activity reports/driver's record

Sends
tax reports to branch chief/press clippings to district offices/folder to tax examiner for approval

MAILS
press clippings report to division headquarters

HARDWARE

Files
Photocopy machine
Hand stamp
Typewriter

REPORTED CRITERIA:
"Time pressures; Constant checking"

SOFTWARE

Traffic tickets
Activity reports
Tax cases
Press clippings
Legal documents
Coded cards
Name tags

EDUCATIONAL CUES

Coding
Filing
Accuracy
Checking
Typing

46. GIVEN A REQUEST FOR TICKETS, THE WORKER HANDLES THE TICKET SALES. (2 task sheets)

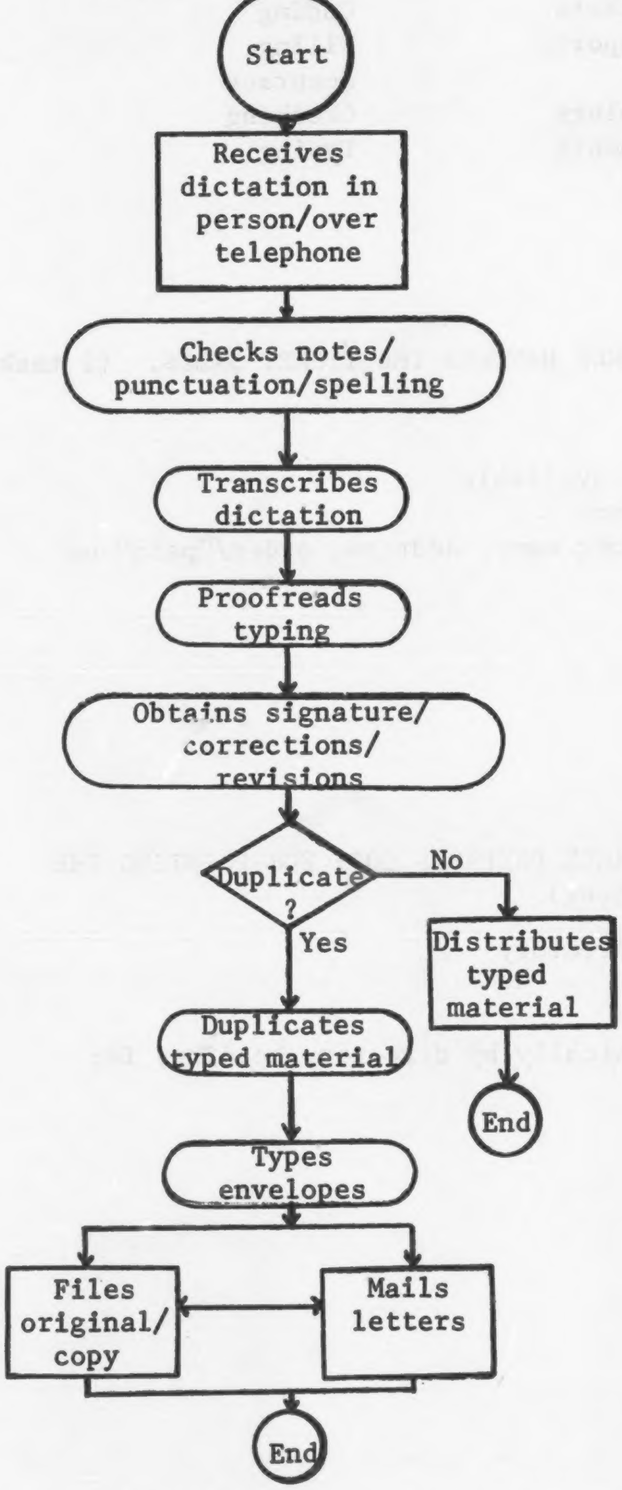
Receives request for tickets
Checks if performance accommodations are available
Answers questions regarding price and event
Writes information on special form/customer name, address, order/"paid" on receipt
Stamps completed forms
Receives money for tickets
Delivers receipt, tickets to customer
Places money in cash box
Records amounts received

47. GIVEN ADDITIONS OR DELETIONS, THE WORKER PREPARES COPY FOR PRINTING THE CITY TELEPHONE DIRECTORY. (1 task sheet)

Receives yearly data of city telephone directory
Obtains addition/deletion listings
Draws red line through deleted listing
Sorts addition/deletion listings alphabetically by directory headings for yellow pages
Stamps date, initials on directory page
Files additions, deletions
Types additions on file cards
Files cards

9.1 ORAL AND WRITTEN COMMUNICATION, TYPING

1. GIVEN DICTATION, THE WORKER TRANSCRIBES COMMUNICATION INTO MAILABLE COPY. (172 task sheets)


Start
Receives dictation in person/over telephone
Checks notes/ punctuation/spelling
Transcribes dictation
Proofreads typing
Obtains signature/ corrections/ revisions
Duplicate ?
No
Yes
Distributes typed material
End
Duplicates typed material
Types envelopes
Files original/ copy
Mails letters
End

HARDWARE

Typewriter
Duplicator

SOFTWARE

Note pad
Dictionary
Transcribed materials:
  Letters
  Manuscripts
  Charts (from standard format)
  Contracts
  Reports
  Minnutes of meetings
  Memos
  Legal documents
  Envelopes

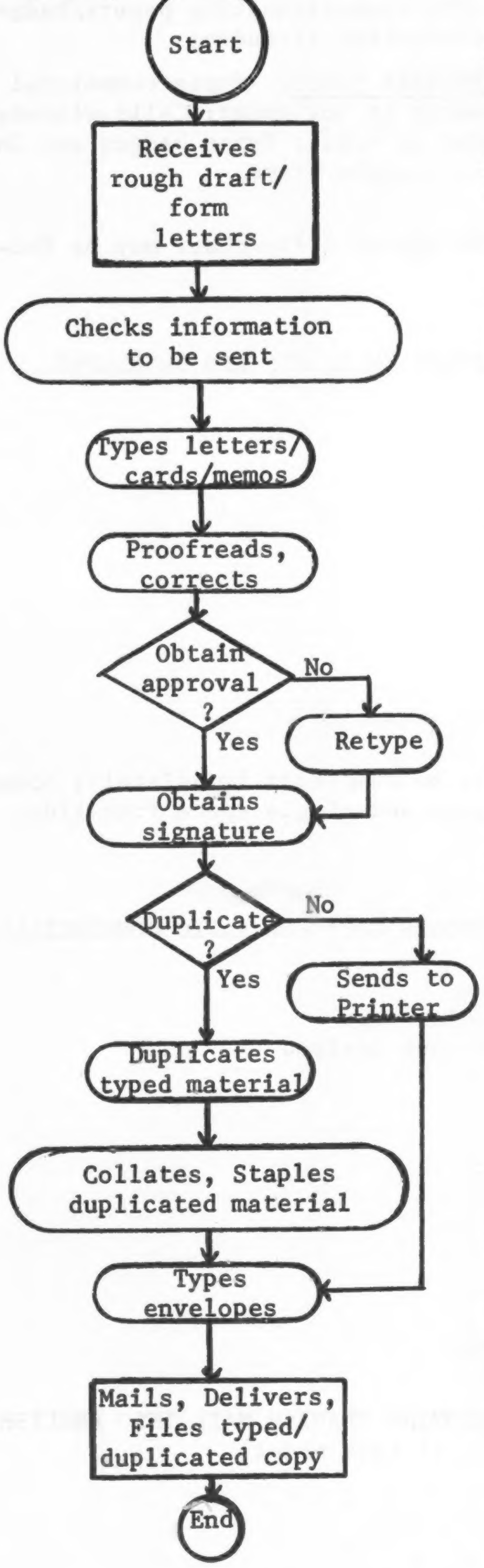
EDUCATIONAL CUES

Typing
Shorthand
Accuracy
Proofreading
Checking
Filing
Transcription

REPORTED CRITERIA: "Good English background; Letter format; A mailable letter that will make a good impression; No erasures permitted on letters going outside company; Worker must type letter perfectly; Some legal terms; Work under pressure; Perfect spelling, punctuation; A high degree of integrity is expected because this work is highly confidential; Great accuracy necessary --no erasing permitted; If letter is signed, it is considered mailable"

SUPPLEMENTARY STEPS: Attaches routing slip for some internal reports; Locates addresses in file; Maintains card index of addresses, subject matter, data sent; Punches holes with paper punch; Collates papers; Writes signature of dictator on letter.

2. GIVEN DOCUMENTS SUCH AS FORM AND ROUGH DRAFT LETTERS, THE WORKER TYPES CORRESPONDENCE, MEMOS, AND OTHER ITEMS REQUIRED BY EMPLOYER. (226 task sheets)


Start
Receives rough draft/ form letters
Checks information to be sent
Types letters/ cards/memos
Proofreads, corrects
Obtain approval ?
No
Yes
Retype
Obtains signature
Duplicate ?
No
Yes
Sends to Printer
Duplicates typed material
Collates, Staples duplicated material
Types envelopes
Mails, Delivers, Files typed/ duplicated copy
End

CORRESPONDENCE AND MEMOS (130 task sheets)

RECEIVES
  rough draft of letters/memos

SUPPLEMENTARY STEP: Hand stamp "restricted data."

OTHER ITEMS REQUIRED BY EMPLOYER (96 task sheets)

FORM LETTERS (15 task sheets)

RECEIVES
  customer files/application forms/names of applicants

FORMS (32 task sheets)

RECEIVES
  debit, credit forms/multilith form/field change order [for computer manufacturers]/ job procedures/appropriations/job bid forms/security log form/claims forms/ data card forms/telegram forms/service forms

SUPPLEMENTARY STEPS: Types certificates; Designs forms; Posts job openings.

CARDS (11 task sheets)

RECEIVES
  new records, albums to catalog/special order sheet/list of names
TYPES
  bibliography card, artist name, album title with number/special order information/names, addresses of prospective clients/ID card/admission cards/ name, address, account number, balance of account/status cards

SUPPLEMENTARY STEPS: Checks off items posted; Assigns numbers to some items.

MISCELLANEOUS DOCUMENTS (38 task sheets)

RECEIVES
  legal documents/meeting minutes/manuscripts/abstract/contracts/programs/log sheet for announcers/catalog sheets/bus schedules, changes/weekly master calendar of trials/work schedules, list of

REPORTED CRITERIA: "Typing 70 wpm; Knowledge of word division; Typing on lines; Accurate record of meetings; Ability to produce flawless work; Technical terminology; Work under pressure; Good sense about readability of material and good judgment in set up; Able to withstand monotony"

RECEIVES (CONTINUED)
names/news releases/invitations/sermons/bulletins/proposals/resolutions for city council/meeting papers/badges for convention attendees

SUPPLEMENTARY STEPS: Types commercial tape number on log sheet; Calls witnesses to appear on trial; Types badges and inserts in plastic frame.

(Except for the above listed differences the number 2 flowchart may be followed for all other steps.)

3. GIVEN ADDRESSES, THE WORKER TYPES ADDRESSES ON LABELS AND ENVELOPES. (8 task sheets)

Receives addresses
Checks spelling
Types addresses
Checks addresses for accuracy
Affixes label to envelopes
Inserts materials
Records sending of materials
Sorts envelopes by zip code
Batches envelopes
Mails/Delivers envelopes

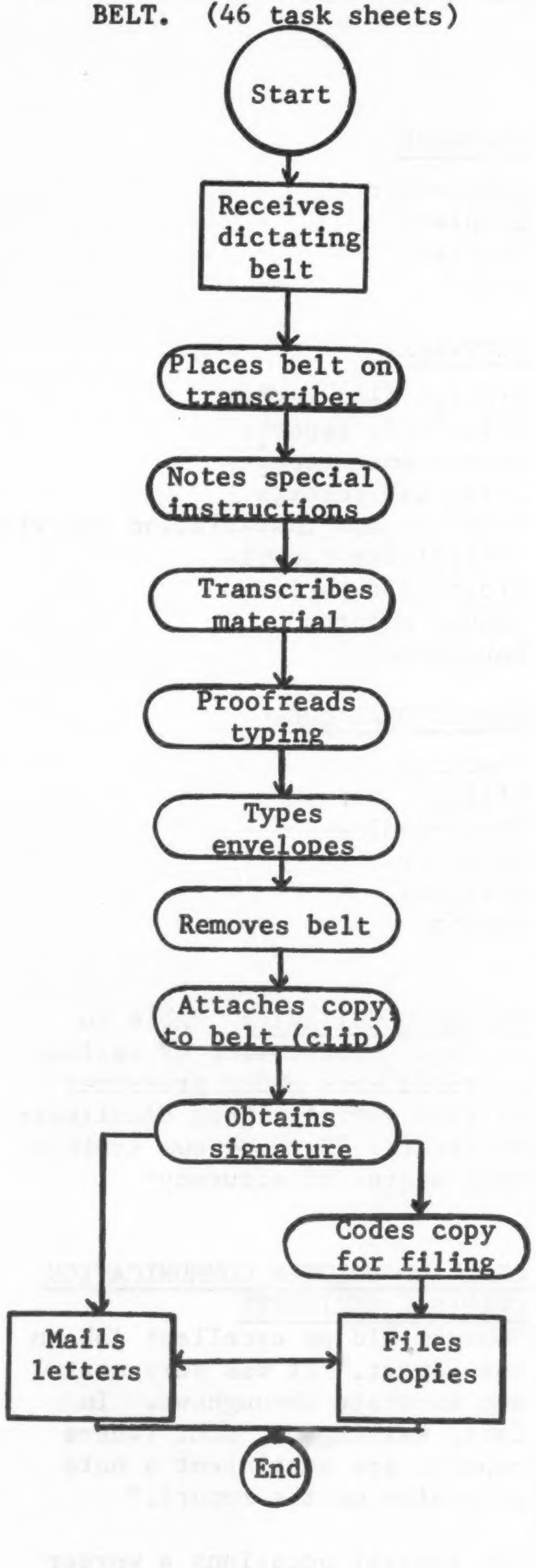
REPORTED CRITERIA: "Time pressures; Work to be completed immediately; Speed not important; Double space three-line address and single space four-line address"

4. GIVEN ORAL INSTRUCTIONS, THE WORKER COMPOSES COPY FOR RADIO COMMERCIALS. (2 task sheets)

Receives instructions to write radio commercial copy
Obtains client's files to determine type of copy desired
Determines type of ad
Writes rough draft in longhand
Scans copy
Counts words to check time it takes to read
Rewrites copy when necessary
Types final draft of radio commercial
Obtains approval of salesman
Types approved commercial copy
Distributes copies
Destroys original instructions from salesmen

5. GIVEN LETTERS, THE WORKER TRANSLATES INCOMING SPANISH MAIL INTO ENGLISH AND OUTGOING ENGLISH MAIL INTO SPANISH. (1 task sheet)

6. GIVEN A DICTATING BELT, THE WORKER TRANSCRIBES COMMUNICATIONS FROM THE BELT. (46 task sheets)


Start
Receives dictating belt
Places belt on transcriber
Notes special instructions
Transcribes material
Proofreads typing
Types envelopes
Removes belt
Attaches copy to belt (clip)
Obtains signature
Codes copy for filing
Mails letters
Files copies
End

HARDWARE

Dictating machine
Typewriter

SOFTWARE

Dictated belt
Envelopes

EDUCATIONAL CUES

Typing
Shorthand
Transcription
Accuracy
Neatness
Proofreading

REPORTED CRITERIA: "Retype letter if many corrections; Transcribe 20 minutes of dictation in 40 minutes; Correct punctuation and spelling; Attractive appearance of letter; Follow directions; Typed same day dictated; Type 70-80 wpm and transcribe at 40 wpm"

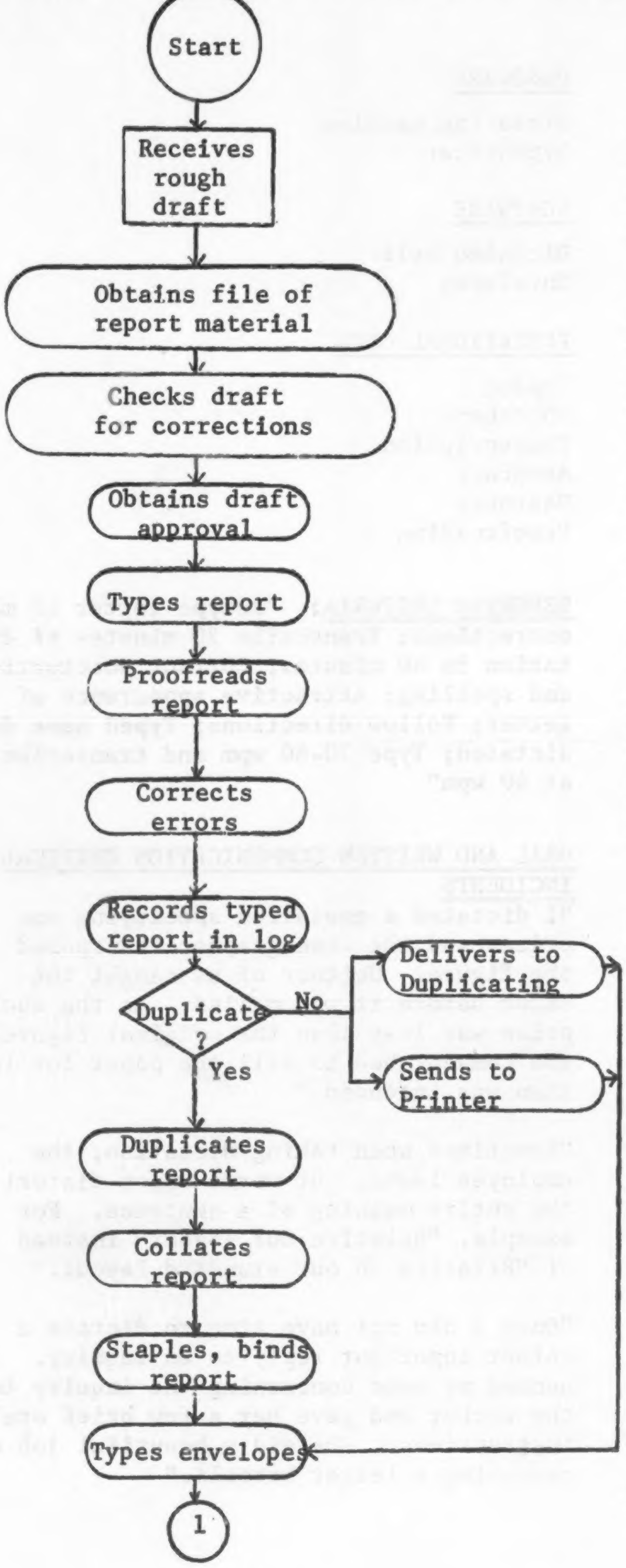
ORAL AND WRITTEN COMMUNICATION CRITICAL INCIDENTS

"I dictated a quotation specifying one price, and the stenographer transposed the figure. Neither of us caught the error before it was mailed. As the quoted price was less than the original figure, the company had to sell the paper for less than was intended."

"Sometimes when taking dictation, the employee leaves out words which distort the entire meaning of a sentence. For example, "Relative our layout" instead of "Relative to our standard layout."

"Once I did not have time to dictate a rather inportant reply to an inquiry. I handed my memo concerning the inquiry to the worker and gave her a few brief oral instructions. She did a beautiful job of composing a letter herself."

7. GIVEN ROUGH DRAFTS OF REPORTS, THE WORKER TYPES REPORTS. (45 task sheets)


Start
Receives rough draft
Obtains file of report material
Checks draft for corrections
Obtains draft approval
Types report
Proofreads report
Corrects errors
Records typed report in log
Duplicate ?
No
Yes
Delivers to Duplicating
Sends to Printer
Duplicates report
Collates report
Staples, binds report
Types envelopes
1

HARDWARE

Typewriter
Stapler
Staples
Files

SOFTWARE

Project plan report
Scientific reports
Maintenance reports
State tax reports
Contract and installation reports
Preliminary reports
Progress reports
Annual reports
Envelopes

EDUCATIONAL CUES

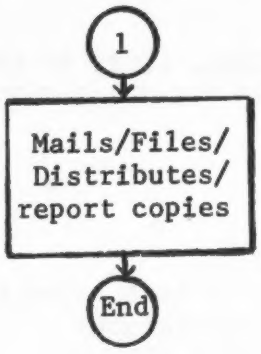
Checking
Filing
Proofreading
Accuracy
Neatness
Typing

REPORTED CRITERIA: "Able to decipher handwriting of various persons; Work under pressure; Collate rapidly; Meet deadlines; No errors; 70 to 80 wpm typing; High degree of accuracy"

ORAL AND WRITTEN COMMUNICATION CRITICAL INCIDENTS

"Worker did an excellent job on one report. It was very neat and accurate throughout. In fact, Washington, D.C. (where reports are sent) sent a note of praise on the report."

"On several occasions a worker typed a report showing taxes on a property had been paid when they had not. In several cases



the escrow company caught the error, which is embarrasing and could have lost a customer. Several times no one caught the error before completion of the transfer which resulted in the company having to pay the taxes and then sue the seller in order to recover them."

8. GIVEN INCOMING LETTERS/ORAL REQUEST TO ANSWER, THE WORKER COMPOSES AND TYPES LETTERS. (17 task sheets)

Receives letters/oral request
Scans letters
Locates necessary information
Determines type of reply
Composes rough draft reply
Types reply/carbons
Proofreads reply
Types envelopes if necessary
Obtains signature
Inserts letters in envelope
Files copy of letter
Mails letter

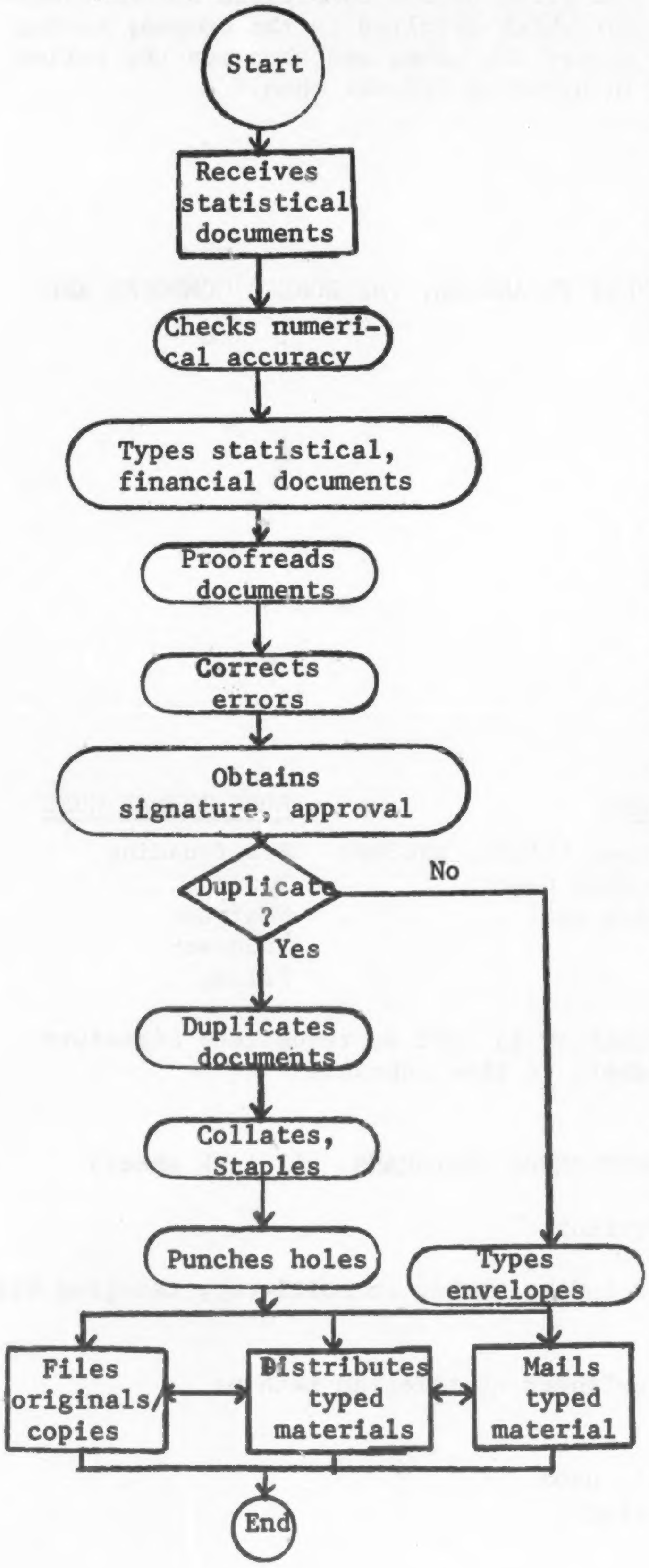
HARDWARE	SOFTWARE	EDUCATIONAL CUES
Typewriter	Envelopes (blank, window)	Proofreading
Signature stamp	Letterhead paper	Typing
Files	Incoming mail	Neatness
		Accuracy
		Filing

REPORTED CRITERIA: "Necessary information is sent as requested; Signature indicates approval or acceptance; Adhere to time schedule"

9. GIVEN TELEGRAM MESSAGE, THE WORKER SENDS TELEGRAMS. (1 task sheet)

Receives telegram message from supervisor
Pulls proper shipping order
Writes shipping date, route, bill of lading number on multi-copy telegram blank
Files shipping order
Sorts copies of telegram
Places original of telegram around cylinder of telegram machine
Activates machine
Removes telegram from cylinder
Files copy of telegram by recipient's name
Delivers copy of telegram to Accounting

10. GIVEN DOCUMENTS SUCH AS ENGINEERING SPECIFICATIONS, LISTS OF CHECKS, AND RATE SHEETS, THE WORKER PERFORMS STATISTICAL AND FINANCIAL TYPING TASKS. (25 task sheets)


Start
Receives statistical documents
Checks numerical accuracy
Types statistical, financial documents
Proofreads documents
Corrects errors
Obtains signature, approval
Duplicate ?
No
Yes
Duplicates documents
Collates, Staples
Punches holes
Types envelopes
Files originals/ copies
Distributes typed materials
Mails typed material
End

HARDWARE

Typewriter
Duplicator (Offset, stencil, fluid process, photocopy)
Adding machine (10-key)
Stapler
Staples
Hole punch

SOFTWARE

List of checks
Receipts, payments on ledger sheets
Financial statements, reports
Rate sheets
Engineering specifications
Statistical reports
Budgets
Ledger summary
Charts
Graphs
Tables

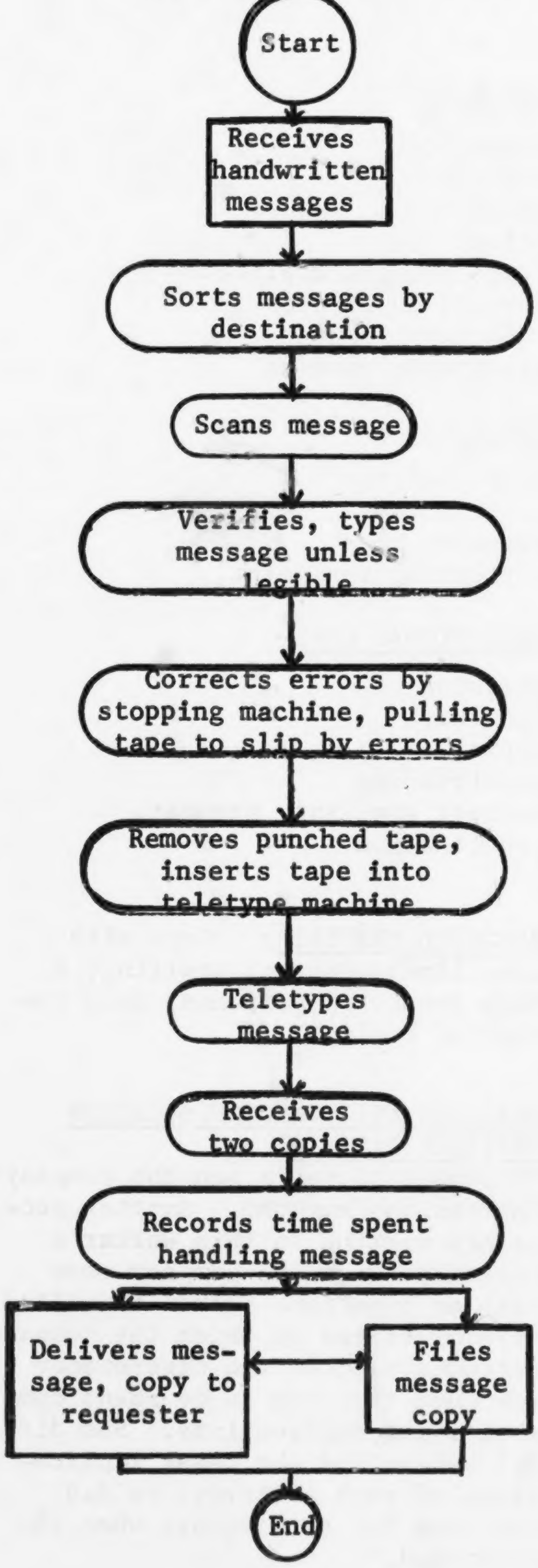
EDUCATIONAL CUES

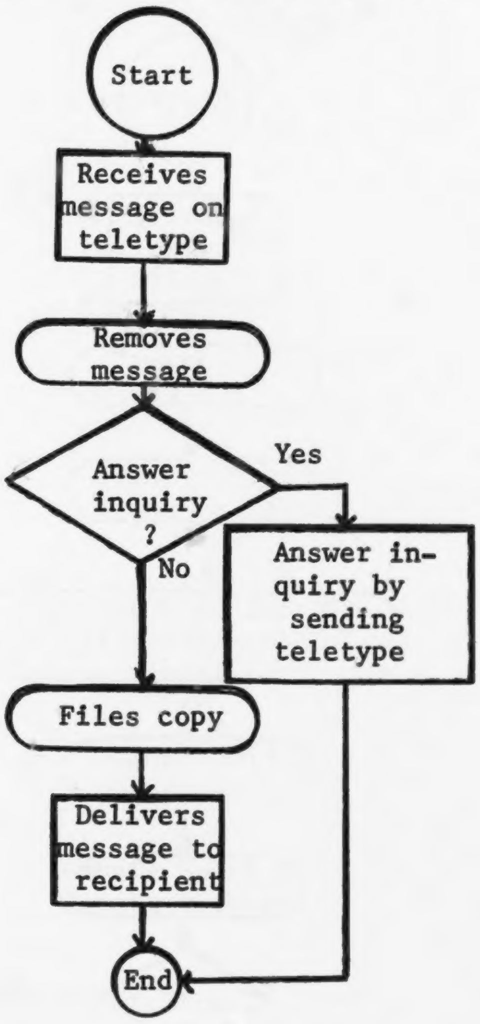
Proofreading
Statistical typing
Checking
Accuracy
Filing

SUPPLEMENTARY STEPS: Makes and mounts transparencies.

REPORTED CRITERIA: "Correct data on financial standing of company transmitted to officers of company; Spelling, grammar, technical grammar important; Pay attention to detail; Able to read difficult handwriting; Meet a deadline"

11. GIVEN A TELETYPE MACHINE, THE WORKER SENDS AND RECEIVES MESSAGES. (19 task sheets)


Start
Receives handwritten messages
Sorts messages by destination
Scans message
Verifies, types message unless legible
Corrects errors by stopping machine, pulling tape to slip by errors
Removes punched tape, inserts tape into teletype machine
Teletypes message
Receives two copies
Records time spent handling message
Delivers message, copy to requester
Files message copy
End


Start
Receives message on teletype
Removes message
Answer inquiry ?
Yes
No
Answer inquiry by sending teletype
Files copy
Delivers message to recipient
End

SUPPLEMENTARY STEPS: Stores dated carbon of tapes; Consults Telex directory for correct way to send message; Assigns number and stamps on message; Checks roll of paper on teletype machine.

HARDWARE

Teletype machine
Sequential stamping machine

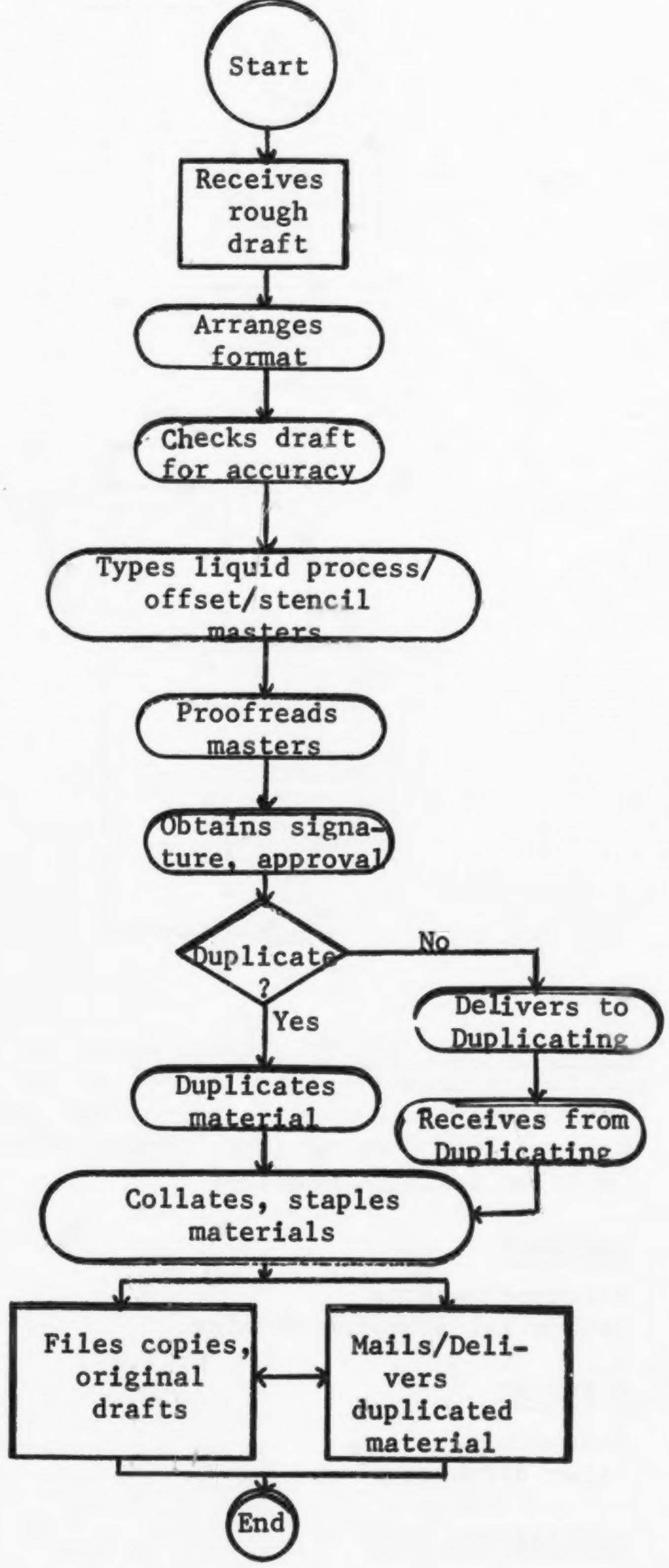
SOFTWARE

Punched tape
Telex directory

EDUCATIONAL CUES

Accuracy
Typing
Filing

12. GIVEN ROUGH DRAFT COPY, THE WORKER TYPES MASTERS AND DUPLICATES. (13 task sheets)


Start
Receives rough draft
Arranges format
Checks draft for accuracy
Types liquid process/ offset/stencil masters
Proofreads masters
Obtains signature, approval
Duplicate ?
No
Yes
Delivers to Duplicating
Duplicates material
Receives from Duplicating
Collates, staples materials
Files copies, original drafts
Mails/Delivers duplicated material
End

HARDWARE

Typewriter
Staples
Stapler
Offset
Fluid process duplicator
Stencil duplicator
Photocopy machine
Xerography machine

SOFTWARE

Carbon ribbon
Masters copy
Erasers
Correcting ink/paint

EDUCATIONAL CUES

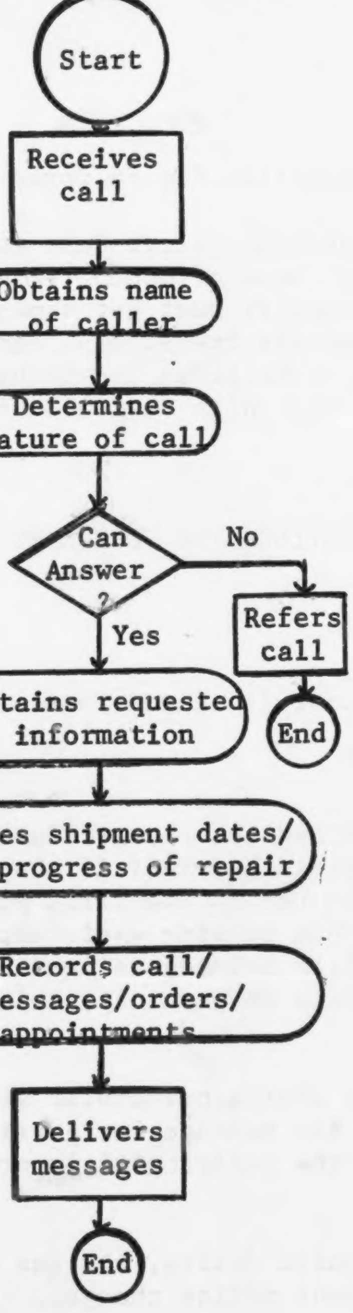
Checking
Accuracy
Typing
Proofreading
Correct spelling, grammar, punctuation

REPORTED CRITERIA: "Cope with a time limit; Correct spelling; A high degree of patience; Good command of English"

ORAL AND WRITTEN COMMUNICATION CRITICAL INCIDENT
"A number of years ago the company's charter was amended. Another secretary working in this worker's capacity typed the company name with an ampersand rather than "And." Several states in which the company operates noticed the discrepancy and much time had to be spent communicating explanations. She did not understand the legal implications of such an error, so did not look for such errors when she proofread."

9.2 ORAL AND WRITTEN COMMUNICATION, ORAL COMMUNICATION

1. GIVEN AN INCOMING TELEPHONE CALL, THE WORKER ANSWERS AND SUPPLIES INFORMATION TO THE CALLER. (108 task sheets)


Start
Receives call
Obtains name of caller
Determines nature of call
Can Answer ?
No
Yes
Refers call
End
Obtains requested information
Supplies shipment dates/ rates/progress of repair
Records call/ messages/orders/ appointments
Delivers messages
End

SUPPLEMENTARY STEPS: Edits orders received on phone; Reminds supervisor of appointments, meetings, deadlines; Types, duplicates reports; Maintains complete record of telephone calls and numbers; Puts off callers when instructed to do so.

HARDWARE

Telephone

SOFTWARE

Rate sheets
Company directories
Message forms

EDUCATIONAL CUES

Company policies, procedures
Communication skills

REPORTED CRITERIA: "Use discretion screening calls and giving information; Handle 50-60 calls per day; High degree of decision making; Recognize calls that are of a serious nature--to differentiate between a power failure call and a need to empty a wastebasket; Must speak softly; Polite, tactful, courteous; Well modulated voice; Work under pressure"

ORAL COMMUNICATION CRITICAL INCIDENTS

"One employee made an effort to learn to recognize the voices of many people who were frequent callers. One time one of the supervisors from another department told me how much he enjoyed calling our department because of the special treatment that he thought he got from the employee."

"Sometimes she was just a little too helpful. If she was trying to locate someone for a caller, she would cut in on phone conversations."

"She forgets to get the name and number of a caller if she is under pressure."

2. GIVEN AN INCOMING TELEPHONE CALL, THE WORKER RECEIVES MESSAGES OR REFERS THE CALL TO ANOTHER WORKER. (151 task sheets)

Receives call
Obtains name of caller
Refers call to another worker
Records call, message
Delivers message

SUPPLEMENTARY STEPS: Takes dictation; Types material for co-worker

REPORTED CRITERIA: "Good diction; Pleasant speaking voice; Take messages accurately; Able to decipher spoken words regardless of accent; Project pleasant, efficient office; Relay messages promptly; Must get names and numbers correctly so call may be returned promptly; Pressure of many phones ringing at once; Sympathetic; Able to calm irate callers; Courteous to all callers; Ability to handle 500-1000 calls per day; High degree of decision making; Diplomatic"

3. GIVEN A TELEPHONE COMPLAINT, THE WORKER PROVIDES THE NECESSARY AID. (1 task sheet)

Receives telephone complaint
Calls hotel switchboard operator
Requests operator page houseman and tell him what is needed where

ORAL COMMUNICATION CRITICAL INCIDENTS

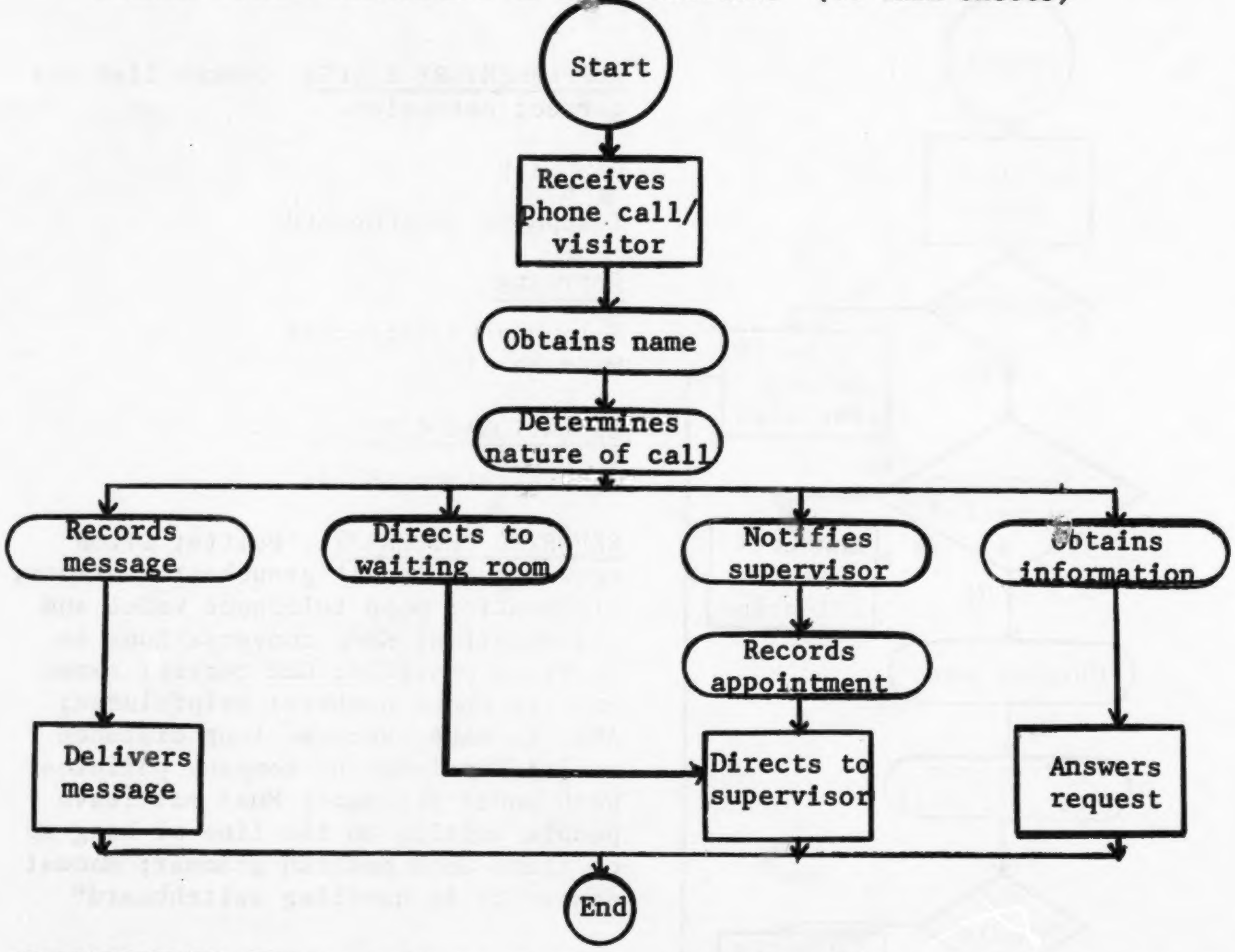
"A field unit sent in a request for assistance and the operator promptly relayed it back to the same unit. The unit informed her that if they were able to help themselves, they would not have radioed her in the first place. She then sent them another radio message telling them to give assistance to themselves repeating the error twice. Fortunately nothing serious resulted this time. However, had the officers needed help desperately, this double error could have been very costly."

"Not too long ago the worker did not see to it that a particular message was delivered to an attorney. The information in the message was pertinent to an upcoming trial. The result was a delay in the relaying of important information to the attorney's client."

"When this employee first assumed her receptionist duties, she was not familiar with this and other buildings and recent office changes. Consequently, much incorrect information was given."

"Many people, particularly ones to whom we owe money, will drop by unexpectedly and demand to see the president or one of the men in charge. Once, one of these men dropped by and none of the men could see him because they were all in conference. I happened to walk into the receptionist's office and heard her very tactfully explain the situation to him. She listened to his complaint and problems very sympathetically and tried to make him feel she understood and would do everything in her power to relay his problems to the men in charge. I'm sure he went away feeling better than he did before."

4. GIVEN THE RESPONSIBILITIES OF A RECEPTIONIST, THE WORKER PERFORMS THE VARIOUS DUTIES PERTAINING TO THAT POSITION. (50 task sheets)


Start
Receives phone call/ visitor
Obtains name
Determines nature of call
Records message
Directs to waiting room
Notifies supervisor
Obtains information
Records appointment
Delivers message
Directs to supervisor
Answers request
End

SUPPLEMENTARY STEPS: Delivers temporary pass to visitors; Notes times entering and leaving on time sheet; Completes visitor's permit; Offers coffee or tea and chats with visitors.

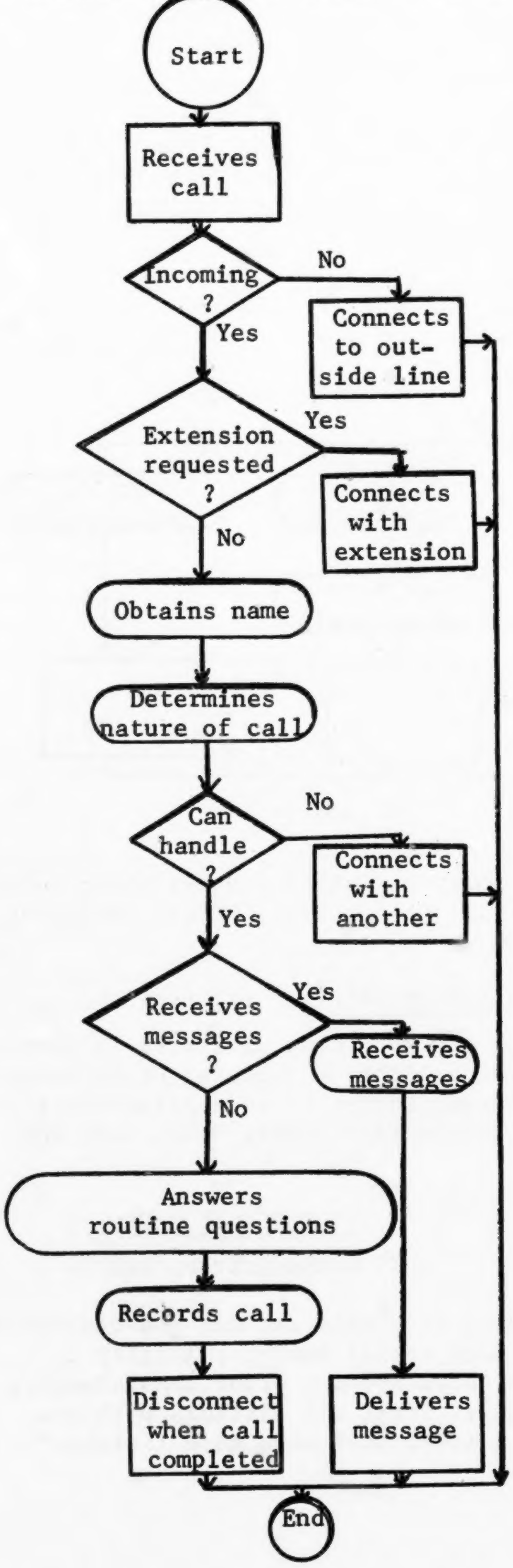
STEPS THAT ACCOMPANY THE POSITION OF SOME RECEPTIONISTS: (17 task sheets)

Assists students in finding work; Arranges appointments; Laminates ID cards; Sells stamps; Assigns rooms; Stamps parking validation tickets; Distributes maps; Takes dictation; Types letters, reports, forms; Files applications; Wraps coins for bank deposit; Issues job application forms; Notes cars and trucks entering or leaving plant.

HARDWARE	SOFTWARE	EDUCATIONAL CUES
Telephone	Note pad	Communication skills

REPORTED CRITERIA: "Must have understanding of people and not get flustered; Patience with people; Absolute accuracy; Good social manners; Ability to greet visitors graciously and to sort out those without prior appointments; Great amount of tact and judgment necessary; Treat all visitors with respect even though it may not be given in return; Must be a good listener"

5. GIVEN THE OPERATION OF A SWITCHBOARD, THE WORKER HANDLES INCOMING AND OUTGOING TELEPHONE CALLS. (42 task sheets)


Start
Receives call
Incoming ?
No
Yes
Connects to outside line
Extension requested ?
Yes
No
Connects with extension
Obtains name
Determines nature of call
Can handle ?
No
Yes
Connects with another
Receives messages ?
Yes
No
Receives messages
Answers routine questions
Records call
Disconnect when call completed
Delivers message
End

SUPPLEMENTARY STEPS: Checks list for correct extension.

HARDWARE

Telephone switchboard

SOFTWARE

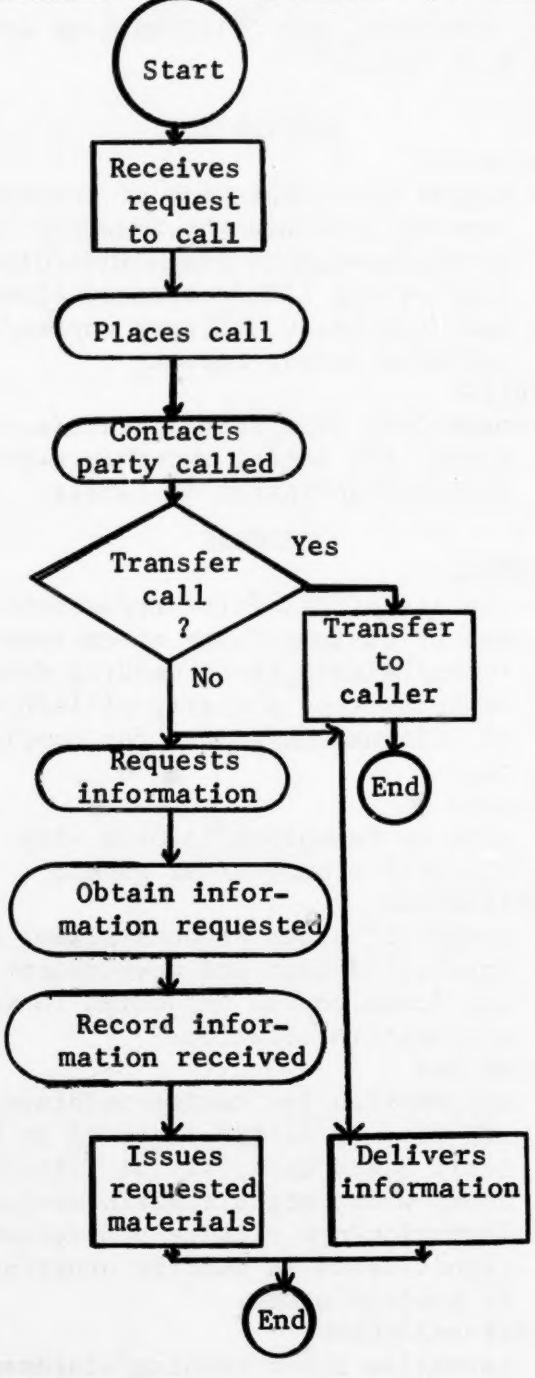
Telephone directories
Message slips

EDUCATIONAL CUES

Communication skills

REPORTED CRITERIA: "Polite; Often required to 'cool' grouches; Cautious; Diplomatic; Good telephone voice and presentation; Keep conversations as short as possible; Get correct names and telephone numbers; Helpfulness; Able to make overseas long distance calls; Knowledge of company policies; Work under pressure; Must not leave people waiting on the line or hang up on them; Good English grammar; Manual dexterity in handling switchboard"

6. GIVEN A REQUEST TO PLACE A CALL, THE WORKER PLACES LOCAL AND LONG DISTANCE TELEPHONE CALLS. (14 task sheets)


Start
Receives request to call
Places call
Contacts party called
Transfer call ?
Yes
No
Transfer to caller
End
Requests information
Obtain information requested
Record information received
Issues requested materials
Delivers information
End

SUPPLEMENTARY STEPS: Arranges for medical exams, appointments; Requests service; Orders supplies; Organizes method of making a number of calls at one time.

HARDWARE

Telephone

SOFTWARE

Appointment book
Order forms

EDUCATIONAL CUES

Communication skills

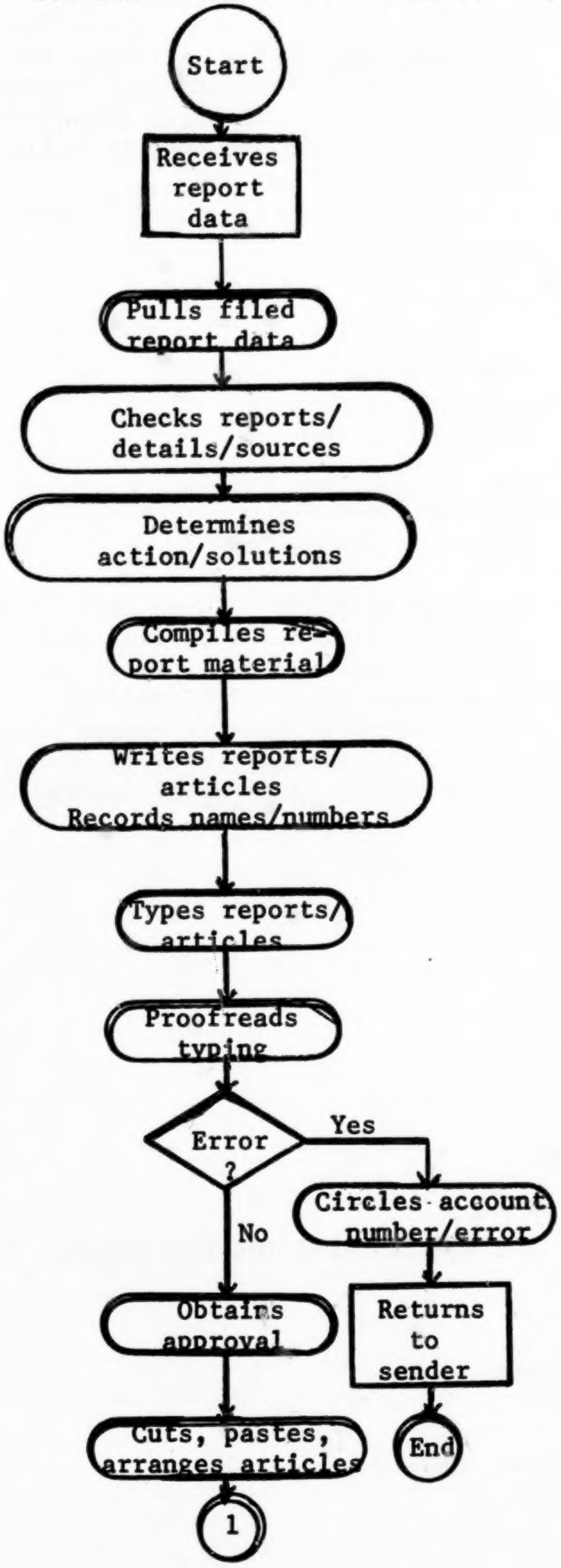
REPORTED CRITERIA: "Must have accurate information; Be patient when placing overseas calls; Spell out names which appear difficult to understand; Pleasant telephone voice and polite, showing interest in the caller and his particular problem"

7. GIVEN A REQUEST TO CONTACT A PERSON, THE WORKER PAGES THE INDIVIDUAL. (2 task sheets)

Activates paging equipment
Requests person paged to contact switchboard
Repeats message
Deactivates paging equipment
Delivers message to individual paged when he appears

10.1 OTHER SERVICES, NON-COMPUTATIONAL RECORDING

1. GIVEN DOCUMENTS SUCH AS SUPPLY LISTS, INVOICES, AND OUTLINES, THE WORKER COMPILES REPORTS AND DOCUMENTS. (30 task sheets)


Start
Receives report data
Pulls filed report data
Checks reports/ details/sources
Determines action/solutions
Compiles report material
Writes reports/ articles
Records names/numbers
Types reports/ articles
Proofreads typing
Error ?
Yes
No
Circles account number/error
Returns to sender
End
Obtains approval
Cuts, pastes, arranges articles
1

ACQUISITION

RECEIVES
supply list/dictation of outline/reports from managers/newspaper/invoices/assignment/magazines/directory errors list/corrected directory book/completed delivery copies/uncollated survey report

Pulls
materials from file/account/account number for social events/pre-printed labels/description of labels

PROCESS

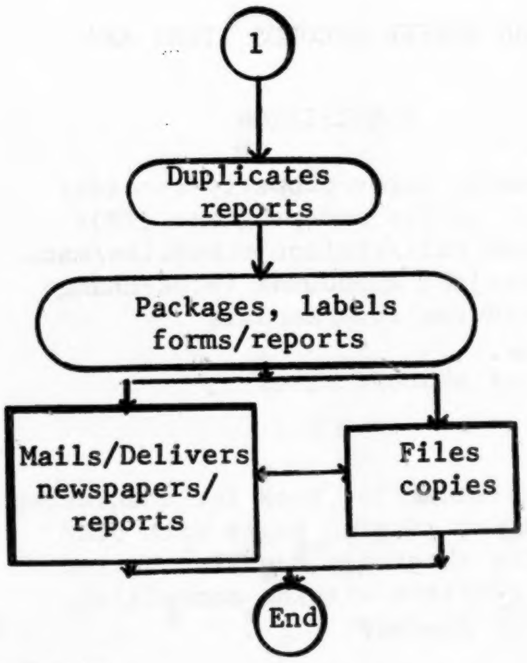
CHECKS
sources of data/library/account number of customer/name of customer/old forms/balance sheet/wedding dates/work sheet of property title/details of information/report for completeness

Stamps
date on newspaper/invoice with employee's number/car papers

DETERMINES
extent of owned property/items of interest/design and development of new forms/course of action to take/alternative solutions

COMPILES
information for coming weddings/forms and reports/facts/attach ad to bulletin board/materials at library/books which might contain needed information/new service orders/monthly report/cards in numeric order/sorts by project number

Writes/RECORDS
narrative about wedding/statement on assessment of property title limitations/rough draft of summary report/information on cards/invoice numbers/recommendations/information received/articles for evening edition of newspaper/date at top of picture/case name and number in control book/account number on card/rough draft of periodic report/changes/reasons for differences in debit and credit


1
Duplicates reports
Packages, labels forms/reports
Mails/Delivers newspapers/ reports
Files copies
End

HARDWARE

Typewriter
Handstamp
Telephone
Bulletin board
Stapler
Paper drill
Duplicator

SOFTWARE

Newspapers
Magazines
Coding books
Reports, lists
Acetate binders

EDUCATIONAL CUES

Checking
Typing
Filing
Communication skills
Duplicating
Coding

TYPES
  final copy of report/articles/stock information/quotations and exchange rates/name and date of magazine, newspaper in upper right-hand corner
Proofreads
  typed materials
Obtains
  approval before sending out
Cuts, pastes, arranges
  pictures and copy/cuts articles numbered/pastes articles on pink paper/ wedding pictures/social events/page of ads/articles
DUPLICATES
  calculation sheet for Accounting/all information pertinent to the topic/final copy
Packages, labels
  forms/reports

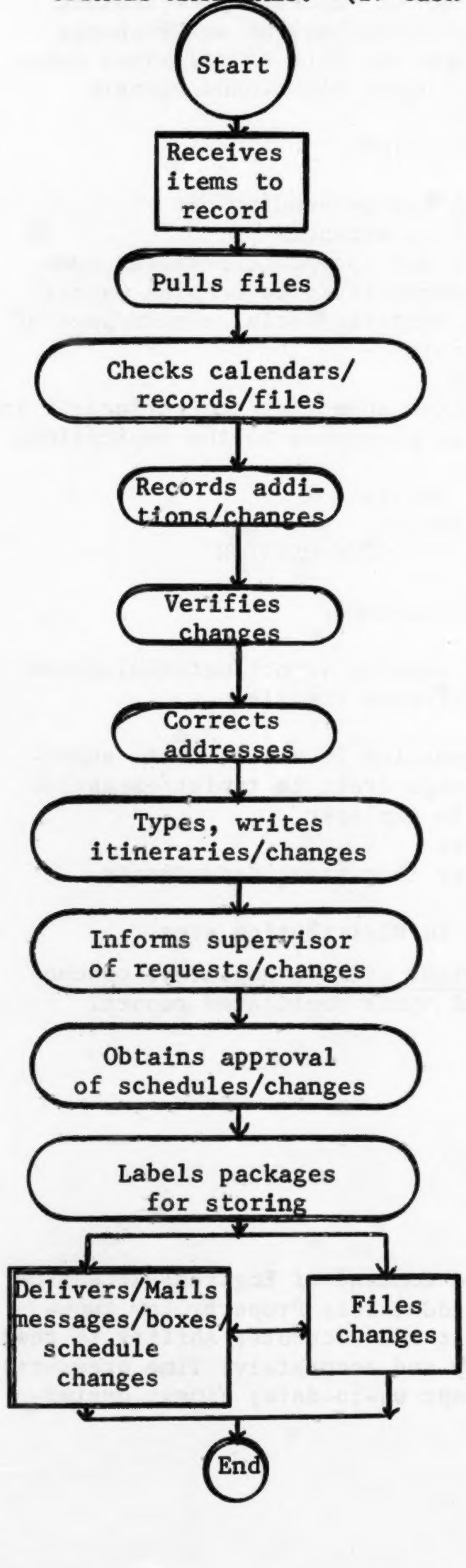
DISPOSITION

MAILS
  forms to customer
FILES
  copy of summary report/materials/newspapers/clipped articles
DELIVERS
  recommendation to new forms to supervisor/rough draft to typist/exception report to employer
Distributes
  newspaper throughout departments
Places
  package in distribution area

SUPPLEMENTARY STEPS: Collates, punches holes, and binds duplicated report.

REPORTED CRITERIA: "Time very important; Good command of English; Attention to detail; Accuracy in spelling and checking addresses; Property law knowledge; High level of judgment; Reports are neat and accurate; Ability to read financial section; 65 wpm typing, file rapidly and accurately; Time pressure; Moderate knowledge of forms design; Must be kept up-to-date; Finger dexterity and speed"

2. GIVEN RECORDS, SCHEDULES, AND MANUALS, THE WORKER RECORDS ITEMS AND UPDATES MATERIALS. (19 task sheets)


Start
Receives items to record
Pulls files
Checks calendars/ records/files
Records additions/changes
Verifies changes
Corrects addresses
Types, writes itineraries/changes
Informs supervisor of requests/changes
Obtains approval of schedules/changes
Labels packages for storing
Delivers/Mails messages/boxes/ schedule changes
Files changes
End

ACQUISITION

RECEIVES
  new catalog pages/property records/lists of cities and programs (TV)/telephone call/airline schedules/manpower project amendment forms/change of procedures form/manuals

Pulls
  change of address files

PROCESS

CHECKS
  daily calendar/log book for unanswered entries/new catalog pages with old/files/log sheet for manuals checked out/to retrieve missing manuals/records for storage

COMPARES
  part numbers to drawings

RECORDS
  changes in master catalog/title of property codes/list of cities and programs on summary sheet/referrals (client) weekly and monthly/date of mailings, payments/subject/addressee, writer, date of contract/number of part/account number/address changes/manpower project amendment information in log/card numbers being stored/dates/procedure changes/whether program is live or delayed broadcast/times taking dictation and number of pages/schedule changes

Verifies
  all changes

Corrects
  addresses

TYPES
  reminder of appointments/list of cities carrying each program/copies of program list/salesman's itinerary/card on new drawing of machine part/change of address form/procedure changes

INFORMS
  supervisor of unanswered requests/new procedures/appointments

Obtains
  approval of schedules/changes

Labels
  packages for storing

HARDWARE

Typewriter

SOFTWARE

Calendar
Maps
Master catalog
Code book/log book
Company procedures manuals

EDUCATIONAL CUES

Checking
Typing
Coding
Proofreading
Accuracy
Filing

DISPOSITION

DELIVERS
storage boxes to Data Control/program listings/messages/schedule to lawyers/airline schedule, change of address to Data Processing/reminders to employer

FILES
old catalog pages/summary sheets/salesmen's itinerary/change-of-address forms/project amendment form/log sheet

MAILS
summary list of programs to client

SUPPLEMENTARY STEP: Inserts new page in master catalog

REPORTED CRITERIA: "Proficient in reading and understanding maps, careful proofreading, interpret information correctly; Type 50 wpm, especially numbers; Accuracy necessary to maintain accounts in current condition"

3. GIVEN DOCUMENTS SUCH AS PRINTOUTS, FORMS, AND STENCILS, THE WORKER CHECKS AND CORRECTS ITEMS. (19 task sheets)

<ins>SUPPLEMENTARY STEP</ins>:
Operates MTST

<ins>HARDWARE</ins>

Typewriter

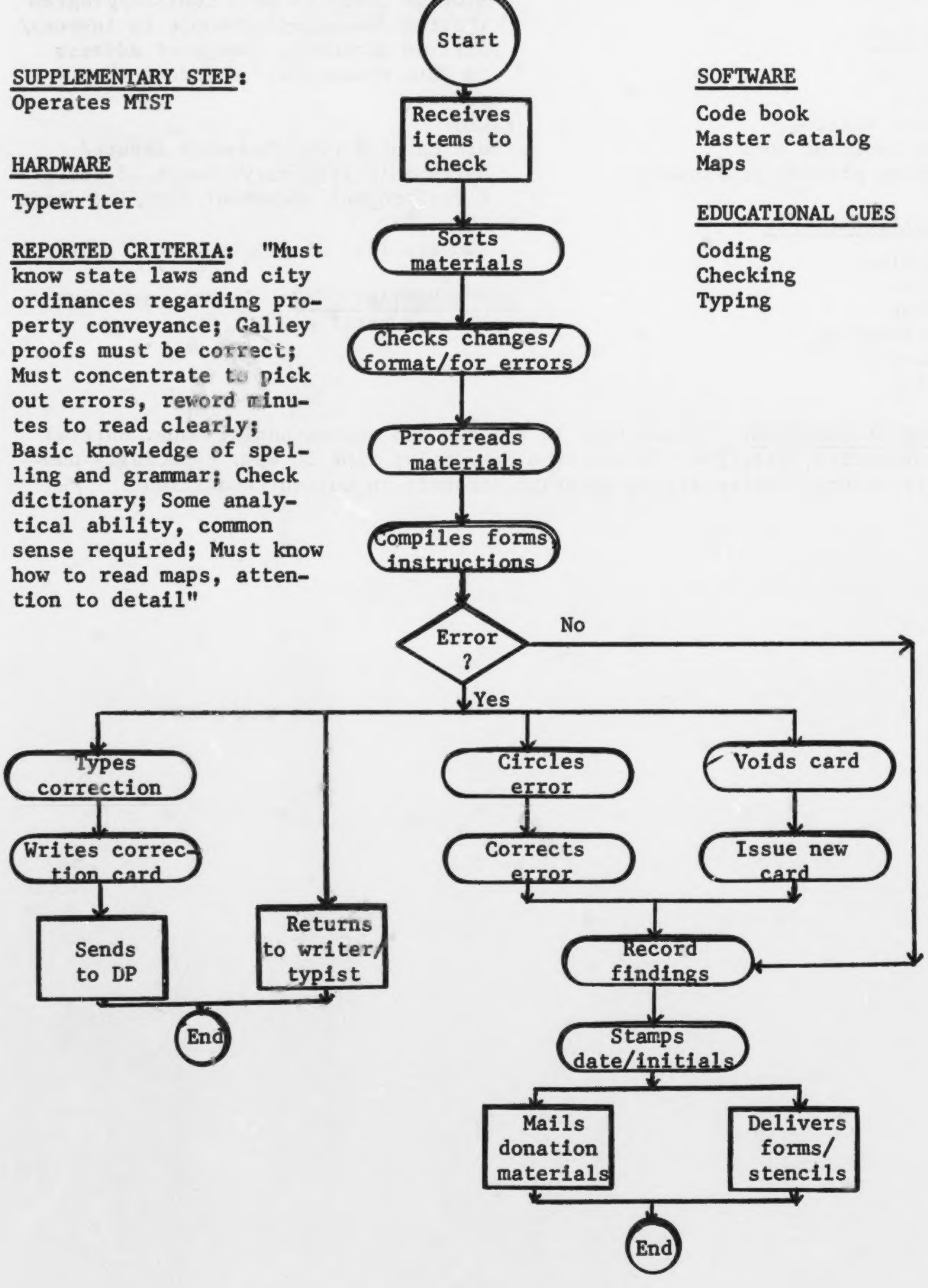
<ins>REPORTED CRITERIA</ins>: "Must know state laws and city ordinances regarding property conveyance; Galley proofs must be correct; Must concentrate to pick out errors, reword minutes to read clearly; Basic knowledge of spelling and grammar; Check dictionary; Some analytical ability, common sense required; Must know how to read maps, attention to detail"

<ins>SOFTWARE</ins>

Code book
Master catalog
Maps

<ins>EDUCATIONAL CUES</ins>

Coding
Checking
Typing


Start
Receives items to check
Sorts materials
Checks changes/ format/for errors
Proofreads materials
Compiles forms/ instructions
Error ?
No
Yes
Types correction
Writes correction card
Sends to DP
Returns to writer/ typist
End
Circles error
Corrects error
Voids card
Issue new card
Record findings
Stamps date/initials
Mails donation materials
Delivers forms/ stencils
End

ACQUISITION

RECEIVES

title transfers/items to research/printouts on errors, donations/galley proofs on telephone directory/change sheets/stencil of city council minutes/catalog sheet, changes/materials for publication/miscoded forms

PROCESS

SORTS

materials/telephone directory additions or deletions slips

CHECKS

title transfers/transactions/paid bill files/galley proofs for spelling errors/figures in master catalog/format for enclosures/catalog sheets and changes/materials for publication errors/grammar/spelling/keypunch card for errors/printouts

Proofreads

typed change sheets/correspondence/city council minutes/catalog sheets/ copy aloud with another worker

COMPILES

necessary forms with instructions to correct errors

Attaches

coded data on catalog sheets

RECORDS

title transfer information on form/findings in report/symbol in corner to indicate corrections

Stamps

galley proofs with date, initials

DISPOSITION

MAILS

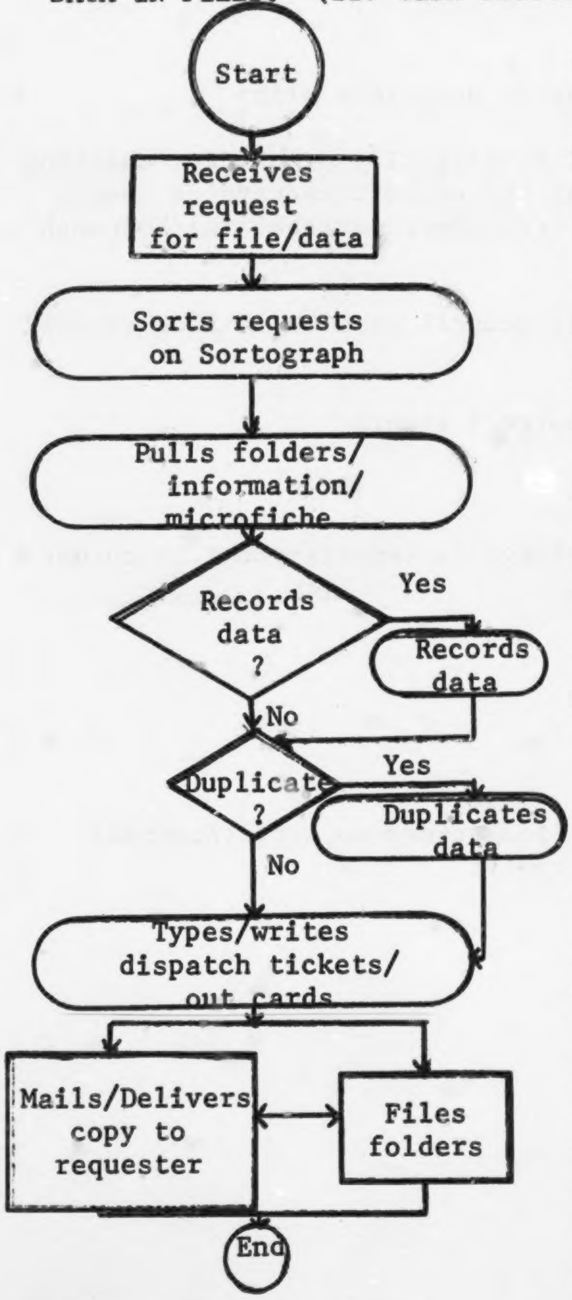
donation materials

DELIVERS

forms to department involved in correction/errors to typist/correct correspondence to employer/stencil to typist

10.2 OTHER SERVICES, FILING

1. GIVEN WRITTEN OR VERBAL REQUEST TO PULL INFORMATION OR FOLDERS FROM FILE OR TO RECORD DATA IN FILES, THE WORKER RETRIEVES MATERIALS OR RECORDS DATA IN FILES. (120 task sheets)


Start
Receives request for file/data
Sorts requests on Sortograph
Pulls folders/ information/ microfiche
Records data ?
Yes
Records data
No
Duplicate ?
Yes
Duplicates data
No
Types/writes dispatch tickets/ out cards
Mails/Delivers copy to requester
Files folders
End

SUPPLEMENTARY STEP: Calls company to request new invoice if invoice cannot be found in file.

THE FOLLOWING LISTINGS REFER TO THE ENTIRE AREA OF FILING:

HARDWARE

Files
Sortograph
Microfilm viewer
Microfilm printer
Photocopy machine
Hand stamp
Typewriter
Adding machine (10-key)

SOFTWARE

Computer printouts
Microfilm
Punched cards
Legal documents
Maps
Blueprints
Tests
Personnel records
Correspondence
Liquid process masters
Real estate documents
TWX message tapes
Reports/books
Pamphlets/bulletins
Phonograph records
Newspaper items
Loose-leaf binders
Magnetic tapes
Statements
Invoices
Requisitions
Purchase orders
File folders

EDUCATIONAL CUES

Updating procedures
Typing
Filing (alphabetically, numerically, geographically, chronologically, subject)
Quick, accurate scanning for information
Follow written/oral instructions

FILING CRITICAL INCIDENT

"The worker files a sales slip for a difficult surname correctly and made several cross reference slips to ensure correct location of the sales slip."

"Auditor found invoices misfiled. The worker filed invoices in paid files that should have been filed in unpaid file.

EDUCATIONAL CUES (CONTINUED)

Read punched cards
Coding
Match correlating documents which are not exactly identical
Cross referencing
Familiarity with Dewey Decimal System
Using tickler file

2. GIVEN INFORMATION THAT IS TO BE UPDATED OR THE RESPONSIBILITY TO KEEP FILES UPDATES, THE WORKER UPDATES FILES. (43 task sheets)

Checks daily auditing list from Data Processing for changes to be made in file/other designated sources
Pulls records from file
Records updated information in file
Refiles records
Pulls inactive folders from file
Files inactive folders in inactive file/destroys inactive folders
Types new label, folder if file is to be updated, such as name or address change
Types list of address changes
Files new or updated files

3. GIVEN CODED MATERIALS SUCH AS LEGAL, PERSONNEL, AND PURCHASING DOCUMENTS READY TO BE FILED, THE WORKER FILES THE MATERIALS. (41 task sheets)

Stamps source documents with appropriate stamp, such as "paid"/department name
Sorts materials alphabetically/numerically/geographically/chronologically/by subject
Pulls related documents from files
Matches documents with pulled documents, i.e., copy of check with invoice file copy, a carbon copy and related correspondence--and attaches one to the other
Files materials

FILING CRITICAL INCIDENTS

"Supervisor had a fuzzy idea that a current problem had been encountered before. He briefed the secretary on the situation and she went to the files and pulled out the correspondence relating to the similar case although it was dated before the time of her employment with the company. She had taken his advice and read filed materials in her spare time."

"The worker located some materials in the library that no one else could find. She is familiar with the library."

4. GIVEN SOURCE MATERIALS SUCH AS LEGAL, PERSONNEL, AND REAL ESTATE DOCUMENTS TO BE FILED AND/OR MAILED, THE WORKER CODES AND FILES/MAILS MATERIALS. (35 task sheets)

Receives legal, personnel, real estate documents
Stamps source documents with appropriate stamp, such as "paid" or department name
Sorts materials by vendor/job number/customer name/destination/by copy
Pulls related documents from files
Matches documents with pulled related documents
Checks accuracy of documents with pulled documents--i.e., invoices and job orders--by computing totals on 10-key adding machine
Mails one copy of document in window envelope
Codes materials to be filed by using code reference books/by underscoring words under which it is to be filed
Cross references materials in all possible classifications
Files materials alphabetically/numerically/geographically/chronologically/ by subject
Types tab/folder if file is not available/if folder needs repair
Records (manually/types) information concerning files on company records such as number of new files made/where item is filed/information in tickler/ suspense file

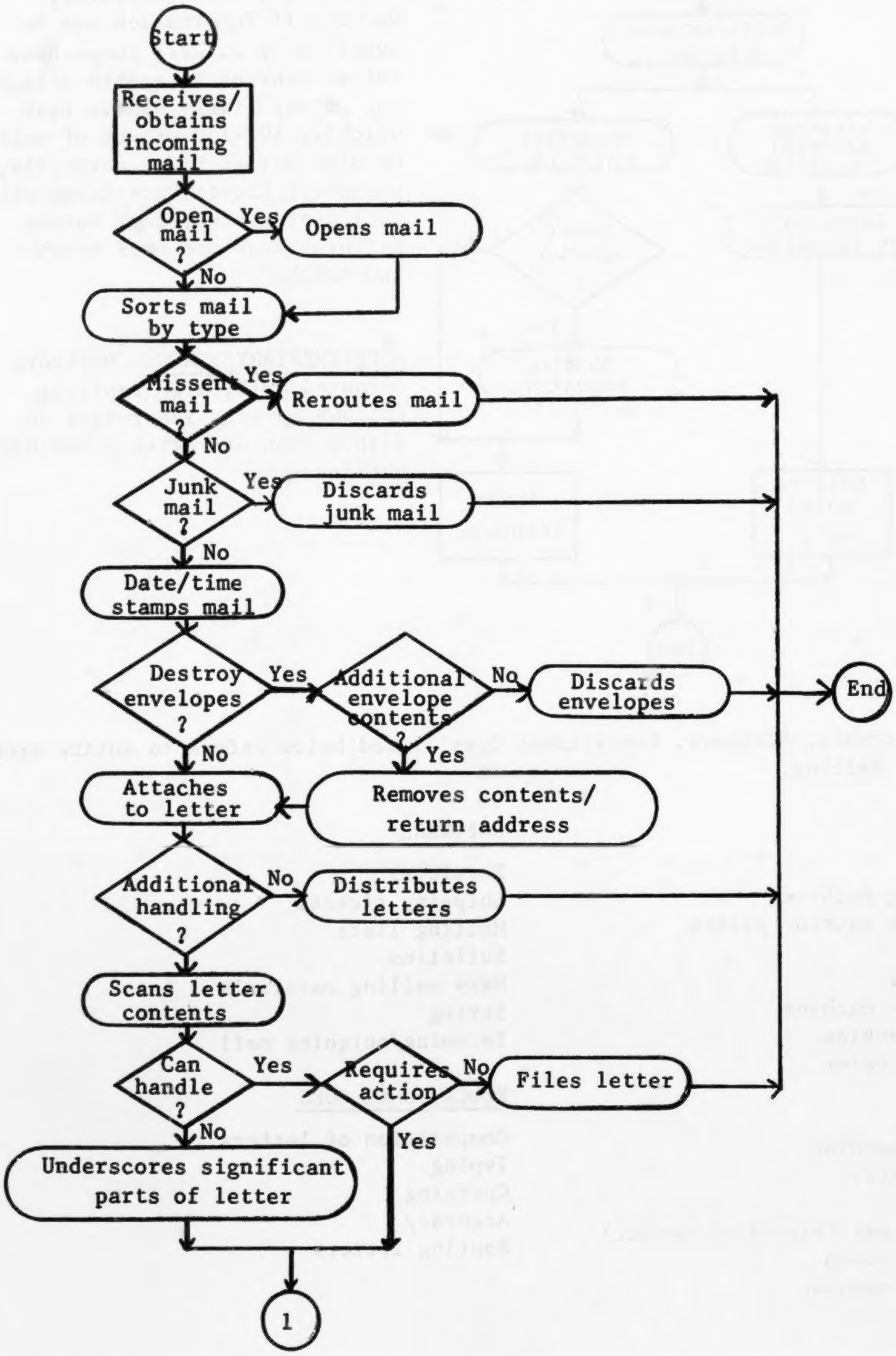
REPORTED CRITERIA: "Files 100-175 books per day; Files 300 source documents per day; Checking ranges from no check other than self-check to all pieces of work checked by someone else; Absolute accuracy more important than speed; Neat and organized; Filing not allowed to accumulate; Patient; Slight typing skills--up to 50 wpm; Asks for help is unsure about where to file materials; Good memory"

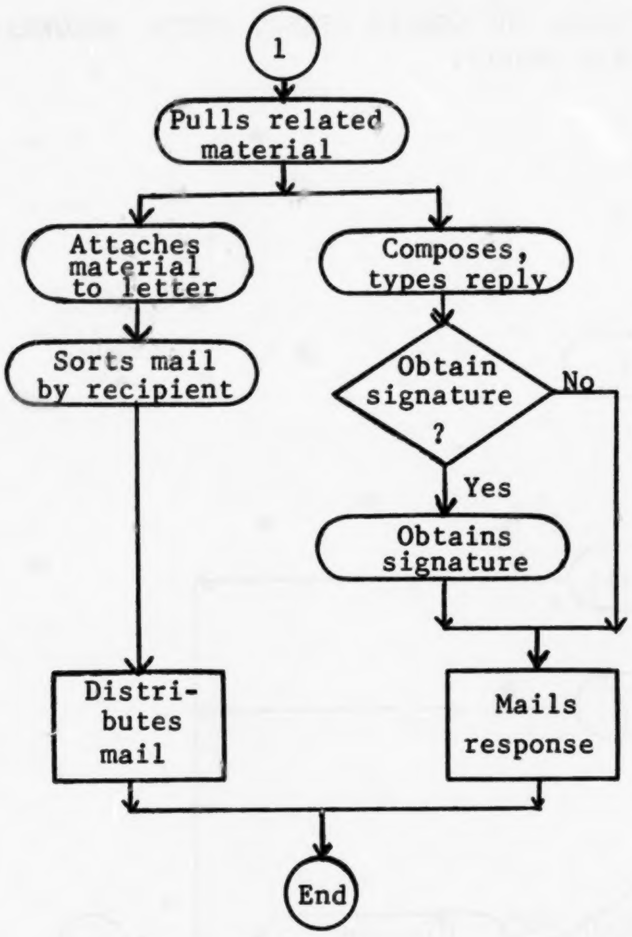
FILING CRITICAL INCIDENTS
"One of the business office people asked her to pull a file of correspondence on a project that was being funded by the Federal government. She knew exactly what he wanted and where to look for it. She doesn't just file. She makes a point of knowing what she files as well as *something about it*."

"One day the supervisor was unable to locate a folder in the files of the department. All folders are filed by number and after three months are sent from the department to Central File where they are kept in storage for 10 years. The worker realized what the supervisor was looking for and quickly went to the Central File to check out the specific file the supervisor needed. She returned shortly with the information he needed for a meeting."

10.3 MAILING

1. GIVEN DEPARTMENTAL INCOMING MAIL, THE WORKER OPENS, SORTS, ANSWERS/ DISTRIBUTES THE MAIL. (99 task sheets)


Start
Receives/ obtains incoming mail
Open mail ?
Yes
Opens mail
No
Sorts mail by type
Missent mail ?
Yes
Reroutes mail
No
Junk mail ?
Yes
Discards junk mail
No
Date/time stamps mail
Destroy envelopes ?
Yes
Additional envelope contents ?
No
Discards envelopes
End
No
Yes
Attaches to letter
Removes contents/ return address
Additional handling ?
No
Distributes letters
Scans letter contents
Can handle ?
Yes
Requires action
No
Files letter
No
Yes
Underscores significant parts of letter
1


1
Pulls related material
Attaches material to letter
Composes, types reply
Sorts mail by recipient
Obtain signature ?
No
Yes
Obtains signature
Distri-butes mail
Mails response
End

REPORTED CRITERIA: "Accuracy in checking for enclosures; Decides if information can be supplied by worker; Comprehend letter content to enable attaching proper files; Handle task quickly; 100-150 pieces of mail handled daily; Route correctly, promptly; Alert; Date stamp all mail distributed; Each worker performs task one week every two months"

SUPPLEMENTARY STEPS: Delivers rerouted mail; Sign replies; Follows up with supervisor on disposition of letter given him earlier

Note: Hardware, Software, Educational Cues listed below refers to entire area of Mailing.

HARDWARE

Car
Addressing machine
Addressing machine plates
Collator
Typewriter
Graphotype machine
Folding machine
Envelope sealer
Mail cart
Mail rack
Inserter machine
Postage meter
Scales
Letter opener (electric, manual)
Date/time stamp
Photocopy machine

SOFTWARE

Envelopes
Shipping tickets
Mailing lists
Bulletins
Mass mailing materials
String
Incoming/outgoing mail

EDUCATIONAL CUES

Composition of letters
Typing
Checking
Accuracy
Routing letters

2. GIVEN DEPARTMENTAL OUTGOING MAIL, THE WORKER PROCESSES THE OUTGOING MAIL. (6 task sheets)

Receives/obtains outgoing mail
Selects necessary enclosures
Separates copies of statements/documents
Checks accuracy of statement with original
Photocopies letter, accompanying documents if necessary
Files original letter received and copy of response
Files memo in suspense/pending file
Types envelopes if necessary
Folds and inserts materials
Collects outgoing mail from departments out boxes
Delivers to Mailing or
Sorts mail by local, outstate
Weighs, stamps, mails letters, packages

Note: In addition, task sheets citing both departmental incoming and outgoing mail handling numbered 13.

3. GIVEN INCOMING COMPANY REGULAR MAIL, THE WORKER PERFORMS MAILROOM DUTIES. (19 task sheets)

Obtains mail twice daily from post office or
Receives mail in Mail Room
Sorts mail by individuals and company
Places mail addressed to individuals in pigeonhole/bins/slots
Opens company mail by machine
Removes envelope contents from company mail
Scans contents for distribution or
Delivers to readers who determine distribution

4. GIVEN CERTIFIED/SPECIAL DELIVERY/REGISTERED MAIL, THE MAILROOM WORKER ACCEPTS AND DELIVERS THE MAIL. (6 task sheets)

Receives special mail
Checks "special mail" book for postman's listing of mail pieces
Signs book acknowledging receipt of mail
Stamps time/date received
Writes exact building location destination on each piece of mail
Lists certified/registered mail numbers
Calls departments to send employee to pick up letter
Writes name of department person notified on envelope
Delivers personally any letters not picked up (twice daily)
Records signature of person accepting letter

5. GIVEN COMPANY OUTGOING MAIL, THE MAILROOM WORKER PROCESSES COMPANY OUTGOING MAIL. (22 task sheets)

Receives company outgoing mail
Sorts outgoing mail by categories: local-first class, out-of-town first class, and special mail, airmail, foreign mail, other mail requiring more than 6 cents postage

Sets postage meter and operates for each mail category
Ties metered mail into bundles with string
Places tied, metered mail in mail bags
Places airmail/foreign mail in specially marked mail bag

SUPPLEMENTARY STEP: Records departmental postage billing

Note: In addition, task sheets citing company incoming, outgoing, and special mail handling numbered 26.

6. GIVEN A MAIL CART AND MAIL TO BE DELIVERED, THE WORKER DELIVERS BUILDING MAIL AND PICKS UP OUTGOING MAIL. (16 task sheets)

Obtains mail cart, telegrams, packages, mail
Arranges mail in cart by stops made on delivery route
Inserts time card in clock to indicate beginning of mail run
Delivers cart contents to building departments
Obtains outgoing mail from each department/out box while delivering mail
Arranges outgoing mail on cart by department
Delivers outgoing mail to Mailing
Inserts time card in clock to indicate conclusion of mail run

SUPPLEMENTARY STEP: Picks up and delivers inter-company mail

7. GIVEN PACKAGING MATERIALS, SUPPLIES, THE WORKER PACKAGES ITEMS, DETERMINES POSTAGE, AND ATTACHES POSTAGE, ADDRESS LABEL TO PACKAGE. (5 task sheets)

8. GIVEN MAIL SLIPS OF NEWLY REGISTERED/CHECKED-OUT HOTEL GUESTS, THE WORKER MAINTAINS THE MAIL RACK OF CURRENT HOTEL GUESTS. (1 task sheet)

9. GIVEN INCOMING PUBLICATIONS FOR CIRCULATION AND INSTRUCTIONS ON ROUTING THE PUBLICATIONS, THE WORKER TYPES AND ATTACHES A ROUTING SLIP TO EACH PUBLICATION. (8 task sheets)

10. GIVEN INCOMING COMPANY MAIL REQUESTING STANDARD PRODUCT INFORMATION, THE WORKER OPENS, ANSWERS, AND MAILS RESPONSE. (6 task sheets)

11. GIVEN INCOMING MAIL AND CUSTOMER FILES, THE WORKER PULLS APPROPRIATE CUSTOMER FILES AND ATTACHES INCOMING MAIL BEFORE GIVING TO CO-WORKER/ SUPERVISOR FOR PROCESSING. (4 task sheets)

12. GIVEN TYPED INVOICES, PURCHASE ORDERS, STATEMENTS, CHECKS, CONTRACTS/ PREPARED COUPON BOOKS, DOCUMENT PACKS, THE WORKER SEPARATES THE MATERIAL, FOLDS AND INSERTS INTO ENVELOPES AND PLACES EXTRA COPIES IN BASKET FOR FILING. (25 task sheets)

13. THE WORKER PICKS UP, SORTS, AND DELIVERS INTEROFFICE MAIL. (6 task sheets)

14. GIVEN MAILING MATERIALS AND INSTRUCTIONS, THE WORKER PREPARES BULK/MASS/ DAILY QUANTITY MAILINGS. (28 task sheets)

Receives materials/mailing instructions
Determines size, type envelopes
Operates addressing machine
Folds, inserts material in envelopes
Inserts envelopes in envelope sealing machine
Weighs one letter
Sets postage meter to amount, date
Operates postage meter running envelopes through it
Sorts local, outstate mail
Batches mail into stacks and ties
Records total postage/total pieces sent
Sends note to originating department giving quantity/postage/date, time sent

SUPPLEMENTARY STEPS: Collects each salesman's letters from all workers and inserts in window envelopes; Types envelopes; Locates zip code and adds to address

15. GIVEN SORTED INTERCOMPANY MAIL/PAYCHECKS/FINANCIAL DOCUMENTS, THE WORKER DELIVERS THE MAIL/ACCOUNTING DOCUMENTS TO THE POST OFFICE/OTHER BUILDINGS, BRANCHES OF THE COMPANY. (7 task sheets)

16. GIVEN MAILING INSTRUCTIONS, SUPPLIES, THE WORKER UPDATES MAILING LISTS/ PLATES AND/OR OPERATES AN ADDRESSING MACHINE. (16 task sheets)

Receives bulletins/metal addressing plates/instructions
Scans incoming mail for address changes/address change requests
Checks revised listing with old listing
Types new plates/cards for mailing list additions (and frames)
Blanks out information on plates to be changed
Places first page of bulletin/envelopes on addressing machine table
Operates addressing machine
Returns metal addressing plates to cabinet
Sorts mail by local, outstate, international
Delivers one-page bulletins to outgoing mail/several-page bulletins to Collating/labeled boxes of addressed envelopes to requesting department/ addressed envelopes to workers for stuffing
Files copy of addressed, sent material

SUPPLEMENTARY STEPS: Collates multiple-page addressed bulletins; Types rolls of labels; Types, files new index card of address addition; Runs publication through folding machine

REPORTED CRITERIA: "Must include all necessary people in mailing; Able to establish priorities; Make minor addressing machine repairs"

17. GIVEN INSTRUCTIONS AND/OR SMALL GOODS, THE WORKER PERFORMS THE DUTIES OF A MESSENGER/DELIVERY MAN. (12 task sheets)

Receives instructions/duplicated copies/typed materials/blueprints/schedules/ product sample
Writes pick-up/delivery/packaging instructions
Selects travel route
Travels to location
Obtains item, shipping ticket copy
Signs shipping ticket/record book
Delivers item--typed material/office, plant supplies/blueprints/work-order sheets/product sample to laboratory/requesting department
Returns vehicle to parking space

SUPPLEMENTARY STEPS: Records mileage for reimbursement; Calls supervisor to inform shipment not ready/incorrect; Sends schedules to departments in other buildings

REPORTED CRITERIA: "Must have chauffeur's license, geographic knowledge of locality, promptness; Must know metropolitan area"

18. GIVEN ENVELOPES IN STACKS OF 100 WHOSE CONTENTS WERE READ BY COMPANY READERS, THE WORKER PASSES EACH ENVELOPE OVER A SCANNING LIGHT DETERMINING IF THE SUPPOSEDLY EMPTY ENVELOPES HAVE ANY ADDITIONAL CONTENTS. (1 task sheet)

MAILING CRITICAL INCIDENTS

"The worker forgot to check an envelope carefully, and a check was thrown out. It took the worker three days going through trash-paper bags to find it."

"This employee does very well in reading and sorting mail that is not addressed to anyone in particular. She is very careful, and in one case she questioned a letter of complaint from a customer and made certain it went to the right department. Had she been less alert, she might have caused embarrassment to the department."

"The worker was making her last mail delivery and pickup for the day. One of the secretaries in one of the departments asked the worker to wait a few minutes while she finished typing the signature lines of a first-class letter. The worker told the secretary that if she wanted the letter to go that day, the secretary would have to bring it down to the mail room herself. The secretary did bring down the letter and told the supervisor about what happened. This situation has caused friction between the worker and this department's secretary."

"One messenger once left a bag of police mail containing evidence and other confidential material in the parking lot behind the police station and drove off. An alert citizen spotted the bag and notified the police who retrieved it and recalled the driver."

"The worker once ran 10-15 envelopes through the metering machine on the wrong side. It was a 15,000 piece mailing job, and she was quite rushed."

MAILING CRITICAL INCIDENTS

"At least once a week the worker is late getting a mail run in. We get telephone calls from second floor offices asking where the mail is. Upon checking he may be found visiting in the hall."

"On her first day at work, the worker sketched an office map and entered the name of the occupant of each office so she could be effective in the performance of her job as mail girl."

"Today we're involved in re-running a mailing. (Lack of coordination between machine maker, postal regulation changes, and servicing of meter machine resulted in a gross error.) The worker must untie, re-meter, re-bundle, re-sack, fill out new postal forms, and deliver back to the post office a huge mailing of the magazine. He is doing this most effectively, quickly, and without complaint."

"A previous worker in making deliveries gave the wrong package to a company executive. The executive rather than getting a projector and film for an important sales conference in New York, actually received a box of printed materials having nothing to do with the sales meeting. The projector and film ended up on the West coast. The error was not discovered until the package was opened in New York."

"The worker quite frequently gets careless and opens personal mail which she is not supposed to open. Monday, one of the office staff became quite angry because this was the second time the worker made this error with this person's personal mail."

"In processing monthly invoices the worker did not check the date of the stamp. The supervisor had to return at midnight and feed the invoices one by one into the postage meter to put the correct date in the middle of the envelope where the post office would recognize the date correction."

"When the worker was preparing the mailing label forms, he mistakenly tore off the wrong part of the form to be used as the label. The person who had ordered the package sent to another ended up receiving it."

"Last Friday the worker interrupted his personal plans in order to get out a large bulk mailing before the postal rates went up. (It has to be in the post office by midnight.) His extra effort saved the company money."

"One employee put the wrong postage (not airmail, special delivery as it should have been) on a letter, and it was returned by the post office. This caused a time delay which proved most inconvenient for the executive who had sent it."

"The worker just finished updating the mailing list with 1,000 additions. She did an excellent job."

10.4 OTHER SERVICES, DUPLICATING

1. GIVEN ORAL OR WRITTEN REQUEST FOR MATERIALS TO BE DUPLICATED, THE WORKER PREPARES THE MASTERS AND DUPLICATES. (46 task sheets)

Determines whether the material is legally reproducible/color of ink, paper, machine to be used
Types master
Proofreads typed materials
Duplicates materials
Collates materials
Binds/staples copies
Records time taken to perform task, number of copies duplicated in log
Notifies requesting department when work is completed
Files originals or copies of work
Sends/mails/delivers material to destination

SUPPLEMENTARY STEPS: Trains new employees in operation of hardware; Readies machine for next use.

THE FOLLOWING LISTINGS REFER TO THE ENTIRE AREA OF DUPLICATING:

HARDWARE

Offset press
Microfilm printer
Lithograph
Typewriter
Collator
Check copier
Addressograph
Liquid duplicator
Photocopy machine
Files
Electric stencil maker
Camera
Blueprint copier
Developing plates

SOFTWARE

Microfilm
Masters
Previously prepared masters, plates
Filed materials
Ink
Paper
Film
Blueprints

EDUCATIONAL CUES

Typing masters
Proofreading
Follow instructions
Alphabetic/numeric filing
Know advantages, limitations in use of machines and materials

REPORTED CRITERIA: "Readable copy of driver's record is given to requesting party; Work always under pressure; Constant rush deadlines are standard; Must operate all hardware; Good color recognition; Accurate, clear microfilm record of all blueprints; Must determine if copy is good enough for specific purpose; Runs 5,000 - 10,000 sheets of printed copy daily; Neat, accurate"

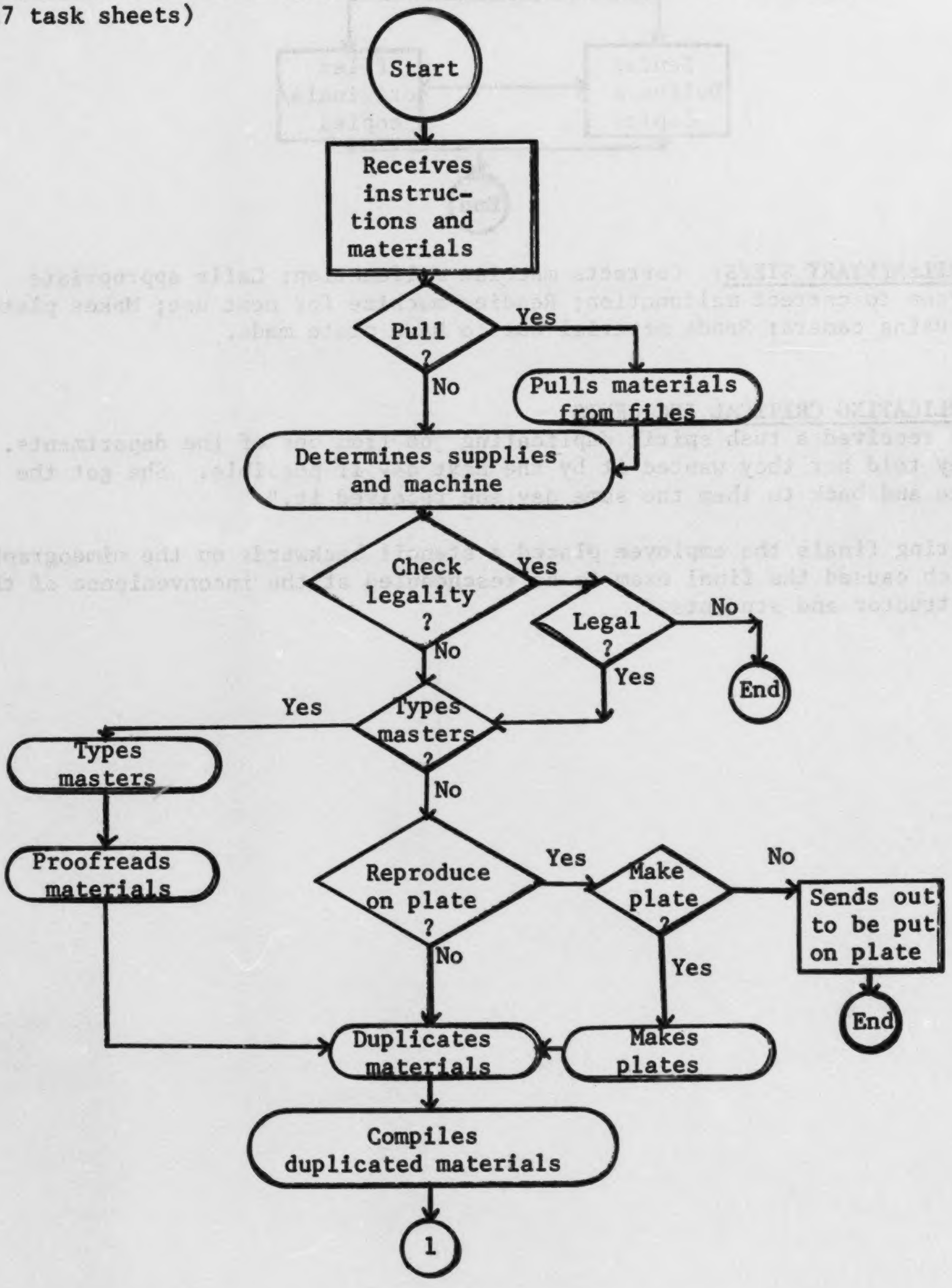
DUPLICATING CRITICAL INCIDENTS

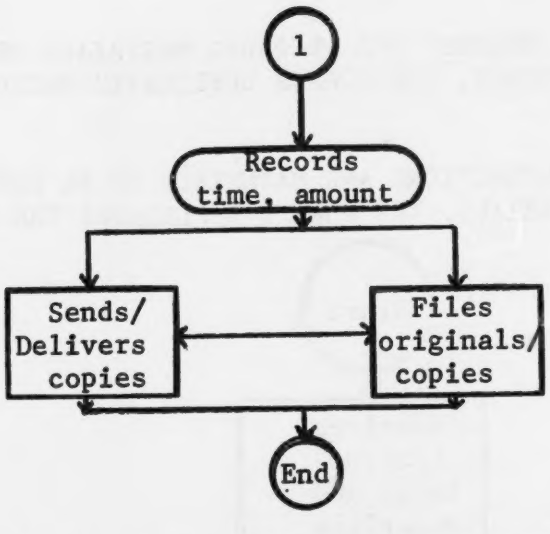
"The worker misspelled several foreign words on one of the menus she typed and duplicated. Luckily the errors were caught. Consequently, someone must proofread her work since a misspelled word often can give a wrong meaning to the item on the menu."

"She just finished typing and duplicating a report of a research committee --51 pages--from a rough draft. She did an outstanding job."

2. GIVEN WRITTEN OR ORAL REQUEST FOR PREPARED MATERIALS OR INSTRUCTIONS TO PULL PREPARED MATERIALS, THE WORKER DUPLICATES MATERIALS. (15 task sheets)

3. GIVEN ORAL/WRITTEN INSTRUCTIONS AND MATERIALS TO BE DUPLICATED/INSTRUCTION TO PULL MATERIALS, THE WORKER DUPLICATES THE MATERIALS. (27 task sheets)


Start
Receives instructions and materials
Pull ?
Yes
No
Pulls materials from files
Determines supplies and machine
Check legality ?
Yes
No
Legal ?
No
Yes
End
Types masters ?
Yes
No
Types masters
Proofreads materials
Reproduce on plate ?
Yes
No
Make plate ?
No
Yes
Sends out to be put on plate
End
Duplicates materials
Makes plates
Compiles duplicated materials
1


1
Records time, amount
Sends/ Delivers copies
Files originals/ copies
End

SUPPLEMENTARY STEPS: Corrects machine malfunction; Calls appropriate person to correct malfunction; Readies machine for next use; Makes plate by using camera; Sends material out to have plate made.

DUPLICATING CRITICAL INCIDENTS

"We received a rush spirit duplicating job from one of the departments. They told her they wanted it by the next day if possible. She got the job done and back to them the same day she received it."

"During finals the employee placed a stencil backwards on the mimeograph which caused the final exam to be rescheduled at the inconvenience of the instructor and students."

11. MISCELLANEOUS

1. GIVEN MATERIAL TO COLLATE, THE WORKER MANUALLY OR USING A COLLATING MACHINE, COLLATES THE PAGES IN PRESCRIBED ORDER. (4 task sheets)

2. GIVEN PRINTED MATERIALS, THE WORKER BINDS RECORDS OR PADS FORMS. (3 task sheets)

3. GIVEN REQUESTS FOR EQUIPMENT, THE WORKER ARRANGES FOR THE SUPPLY OF OFFICE EQUIPMENT AND COORDINATES MATERIALS AND EQUIPMENT MOVES. (3 task sheets)

4. GIVEN ORAL INSTRUCTIONS, THE WORKER PERFORMS PROCEDURES AND TIME STUDIES FOR THE COMPANY. (3 task sheets)

5. GIVEN COMPUTATIONS, THE WORKER SKETCHES LINES AND GRAPHS TO SHOW GRAPHIC TEST RESULTS. (3 task sheets)

6. GIVEN RECORD CARDS AND SAMPLES OF SEED OR SLAG, THE WORKER PERFORMS TESTS AND WRITES A SEED COUNT REPORT OR SLAG SAMPLE REPORT. (3 task sheets)

7. GIVEN THE NEED, THE WORKER KEEPS THE RECEPTION ROOM IN PROPER ORDER AND MAKES AND SERVES COFFEE FOR EMPLOYEES AND GUESTS. (3 task sheets)

8. GIVEN VOUCHERS OR DOCUMENTS, THE WORKER RUNS ERRANDS TO DELIVER OR PICK UP MATERIAL. (2 task sheets)

9. GIVEN DELINQUENT AUTO LOANS, THE WORKER COLLECTS THE AMOUNT DUE OR REPOSSESSES THE AUTOMOBILES. (2 task sheets)

10. GIVEN BASIC PLANS, THE WORKER PREPARES DRAWINGS OF BUILDINGS OR ROCKET ENGINES. (2 task sheets)

11. GIVEN INFORMATION ON PROSPECTIVE PRODUCT, THE WORKER DETERMINES THE BEST WAY TO MANUFACTURE THE PRODUCT. (1 task sheet)

12. GIVEN A NEW FRANCHISE DEALER, THE WORKER INSTRUCTS A PART-TIME WORKER TO TYPE AND HANDLE FRANCHISE CONTRACTS. (1 task sheet)

13. GIVEN FINANCIAL RECORDS OVER FIVE YEARS OLD, THE WORKER BOXES AND SEALS DOCUMENTS FOR PERMANENT STORAGE. (1 task sheet)

14. GIVEN NOTIFICATION OF ACCIDENT OR EMERGENCY, THE WORKER CALLS DOCTORS, HOSPITALS, POLICE, FIRE DEPARTMENT, AND INSURANCE CARRIER TO HANDLE EMERGENCIES OR NECESSARY ARRANGEMENTS. (1 task sheet)

15. GIVEN LOST ARTICLES, THE WORKER HOLDS ALL ARTICLES UNTIL CLAIMED. (1 task sheet)

16. GIVEN COMPUTER OUTPUT SHEETS, THE WORKER ESTABLISHES A FORMAT OR STEP PROCESS AS INSTRUCTED. (1 task sheet)

17. GIVEN BLUEPRINTS, THE WORKER PREPARES SPECIFICATION SUMMARIES OF MATERIALS FOR SHOP USE. (1 task sheet)

18. GIVEN JOB DIRECTIONS, THE WORKER AIDS SKILLED WORKERS SUCH AS ELECTRICIANS, PLUMBERS, AND PAINTERS BY FOLLOWING THEIR ORAL INSTRUCTIONS. (1 task sheet)

19. GIVEN PUNCHED TAGS, THE WORKER OPERATES A TAG MACHINE FOR DEPARTMENT STORE MERCHANDISE. (1 task sheet)

20. GIVEN STORE MERCHANDISE, THE WORKER GIFT WRAPS PACKAGES FOR DEPARTMENT STORE CUSTOMERS. (1 task sheet)

21. GIVEN PHONOGRAPH RECORDS, THE WORKER SCREENS RECORDS BY UNPACKING, LISTENING TO, AND SORTING RECORDS. (1 task sheet)

22. GIVEN REQUEST FOR RATES, THE WORKER RECORDS UTILITY RATES FROM A METER BOOK FOR CUSTOMER AND SENDS FIGURES TO BILLING. (1 task sheet)

23. GIVEN ITEMS TO BE TESTED, THE WORKER ASSISTS IN WIND TUNNEL TESTS. (1 task sheet)

24. GIVEN CARBON COPIES OF LABELS, THE WORKER DATE STAMPS, SORTS, AND FILES LABELS. (1 task sheet)

MISCELLANEOUS CRITICAL INCIDENTS

"Once the worker painted wrong edges of forms with rubber cement when padding. He had to wait until it dried, scrape the cement off, trim the edges again, and paint the proper edge."

"Recently some pages were omitted by the worker in collating one of the classified documents. Fortunately, the error was caught before the report left our plant so it only resulted in extra work. Had it gone out in that condition, it would have resulted in work being repeated at our expense."

"A report was received for binding late one afternoon. It had to be out the next day. The worker came in at 6:30 a.m., and he worked on it steadily under constant pressure until 4:30 p.m. The job was complete and correct and we made the deadline."

Chapter V

SUMMARY AND RECOMMENDATIONS

A. PRODUCTS OF NOBELS

The current phase of NOBELS can be summarized by a listing of its products. The primary product was a set of 375 performance goals representing office occupations. The goals were arranged according to two subsets. The first subset by SIC contained 63 goals from finance, insurance, and real estate--banking and 24 goals from service--medical; the remaining 288 goals were presented according to a business functional classification scheme.

The NOBELS Verbs and Synonyms, a list of 108 verbs used in classifying 32,447 steps of task performance and its successor list of 57 verbs and synonyms were also produced (Chapter III and Appendix E). Tentative findings from the emergent office are appended (Appendix A) and reference has been made to the earlier Taxonomy of Office Activities (Huffman, Brady et al., 1968).

Data collection reports were cited: Calhoun (1970), Erickson (1969), Price and Hopkins (1970), and Tonne (1969). The University of Georgia report is also a source of correlative analyses of interaction critical incidents and of hardware used in office task performance (Calhoun, 1970). The Talent Inventory (Cook et al., 1970) as a technique and a result of collecting and identifying leadership with talents to modify office and business education learnings programs is the last of the current output of NOBELS to be cited.

B. RECOMMENDATIONS AND DISCUSSION

In a development project such as NOBELS, the product of a particular phase of development is but a brief introduction to the next phase. As in any operations research, the product of NOBELS is considered as a less than perfect product to be tested and modified in the light of new evidence. The feedback circuitry of NOBELS is inherent for a continuing evaluation and modification. But the key to continuation of NOBELS is one of acceptance of a system approach--acceptance dependent upon advocacy.

We move, therefore, away from the usual role of technical report writer in which conclusions would be drawn about the current products of NOBELS. Rather, we move toward the role of advocate who in his advocacy recognizes the necessity for numerous professional discussions in journals and professional meetings of whether office education should, in fact, embrace in practice a system approach to learning. In this different role, we attempt to assess some of the forces for change toward the behavioral persuasion in office education programs. In this role, we admit a bias toward embracing the controls inherent in NOBELSystem model, for without possessing such a bias, the current outputs in their present form could not have been produced.

1. Curriculum Implementation

The next step of NOBELS is one of selecting from the current inventory of performance goals promising learnings sets to arrange and test programs in classrooms.

Discussion :

Without further organized attempts at curriculum renewal in office and business education, utilization of NOBELS in modified or new learnings programs will be media developers, state or institutional curriculum groups, and other leaders in teacher education.

Media developers in the past, primarily publishers and textbook authors, have proved willing to develop materials of any description that would be purchased for classroom use. The very nature of their mission, however, causes conservative practices that will not replace the "best seller" textbook by classroom products whose sales have been untested.

Still the current ferment in the education market has created a climate for change. This climate is one in which current media developers, we suspect, are willing to accept modifications toward the reality and the specificity of NOBELS behavioral goals. Without further, organized attempts, then, NOBELS inventory of performance goals can and will influence curriculum renewal in office education through media.

We cannot rule out, of course, the entrepreneur who, assessing the public's impatience of nonmeasured qualities of graduates leaving present public institutional education, may create a new distribution channel of purveying media directly to the consumer. Such an alternative can be a competitive threat only to the present establishment of organized education for office occupations, and not the public at large.

Within the current establishment for office training, the key to utilization of the current NOBELS performance goals depends on pre- and in-service teacher education. As an observation, teacher educators are at present inserting some exposure to a system approach and its encompassed performance goals as a foundation for occupational education. A considerable lag does exist in teacher education from availability to advocacy, to acceptance of the system approach and the now available base of performance goals. More serious, in our view, is this: teacher educators' impact on pre- and in-service teachers will be minimal--i.e., until these teacher educators are willing to invoke the controls of a system approach in their own teacher preparation curriculums.

With a mission determined by Federal and state legislation to improve office education programs, we envision state supervisors of business and office education to be an important leadership group in implementing NOBELS. Their contractual foundation for subsidy of specified local school programs provides a financial incentive for classroom teachers to change. In-service teacher programs supported by the Vocational Education Act of 1963 as amended are being geared toward changing recognized foibles of traditional curriculum.

Within the current educational scene, the mushrooming community college movement, unfettered by traditional program patterns, may be a force for developing, trying, and testing NOBELS.

Even without further organized attempts, we believe NOBELS will have an influence on modification of current office preparation curriculums.

2. Replication and Refinement

Additional and continuous study of office task performance is a necessity for up-to-date curriculum modification.

Discussion

While claims to a statistically drawn sample were not made, we do admit to a carefully extracted set of current behaviors representing the basic tasks of office occupations surveyed. Refinements in techniques and in-depth study will probably reveal additional perceptions. Differing classifications or modifications of the present schemes can bring refinements.

3. "Fundamentals" of Office Task Performance

The three "fundamentals" of office task performance as derived should be inserted immediately in all current instruction leading to office job preparation.

For emphasis, the "fundamentals" are repeated here:

> Accuracy as a desired generalized behavior of office workers is a function of checking for potential error and of correcting error. When supervisors so universally say they require "absolute accuracy" as they did in NOBELS' interviews, we must conclude they mean: "An accurate office task performance means perceiving what an accurate product is, identifying likely points of error, checking and correcting so that the product is accurate because the worker has checked and eliminated any potential inaccuracy."
>
> Inadequate communication skills, both oral and written, are a frequent source of unsuccessful office performance. Communication skills adequate to instruct others or to modify office actions are sought by supervisors.
>
> Organizing and classifying of both numerical and verbal data--all symbolic data--are even more necessary behaviors in our emerging electronic technology than ever before.

Discussion

Perhaps the necessity of emphasizing checking, communication, and computation components of all task performance is obvious. Yet, the evidence collected here cause us to underline the necessity of at least the universal demand of employers for these behaviors in their office employees. The fact that present employees in the NOBELS survey were often criticized for not possessing these fundamental skills is probably strong enough evidence that current learnings programs are not yet good enough.

The number of interaction critical incidents reflecting "thin-skinned," angry workers almost caused us to add a "fundamental" related to social graciousness in dealing with people within and without the business organization. Whether the added educational emphasis of social graciousness takes the form of sensitivity training, of case study in application of the golden rule, or of the more mundane "how to win friends," office workers in our sample displayed weaknesses in interacting with other people.

4. Banking and Medical Sets of Goals

SICs to be included in office preparation curriculum need further study.

Discussion

Separation of performance goals by standard industrial classification of finance, insurance, and real estate represented by banking and services represented by medical needs further study.

In any curriculum of the future, selection of goals from all SICs in any depth is not feasible. Yet, a movement away from the current limited bookkeeping textbook practice of presenting the retail store or professional office as the limits of business practice provides too limited a view of business enterprise. Increased scope of types of businesses plus emphasis of the skills of "learning to learn" would seem to be a needed direction.

In the meantime, banking as an SIC studied here, does provide performances in which the fundamental of checking and accuracy and numerical data handling is prerequisite to successful completion. Banking performances also provide a student with a different view of money and credit not available in other enterprise relations with a bank--that of the seller of banking services.

Likewise, in a service SIC such as medical care, successful performances seem to be judged by a pervading attitude of "tender, loving care" of distraught patients. Such an attitude learned through learning to perform medical tasks appears promising toward teaching empathic interaction behavior, a prerequisite to social graciousness.

5. Professional Judgments in Developing Sets of Office Learnings

Many professional decisions must be made to develop modified sets of office tasks leading to efficient office learning programs.

Discussion

Through Chapters III and IV, hunches about curriculum patterns were identified as evidence suggested them. The need for further study of defensible means of arranging sets of learnings in a curriculum program is obvious. In the meantime, it would be premature to assume a set of learnings to be transplanted office tasks performed under simulated office conditions. We admit that the assumption might provide improvement over the present sterility of textbook-lecture teaching. Still, not enough is known about the learner or the different kinds of learners who can profit from selected sets of office performance goals. Also, not enough is known about the conditions of learning, let alone a strategy of instruction, to bring about efficient performance in learners.

C. CONCLUDING REMARK

Public policy is committed to the strengthening and changing of public education more nearly to produce educational products that are assessable. We have reason to believe that public agencies will continue to implement changed direction in education through funds to support development projects such as NOBELS. The current authors, collectively and individually, have a professional commitment to propose further phases of NOBELS to funding agencies. Yet we have no proprietary rights to any funds currently or to be made available. We urge, therefore, all those researchers and developers who envision a next phase of NOBELS development to propose and to seek funds for continuing the renewal of office and business education curriculums, the foundation of which is contained in our current outputs.

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APPENDIXES

APPENDIX A

TABLE 50. FIRST SEQUENCE OF NINE HIGH-PRIORITY ABILITIES PROPOSED FOR PREPARATION OF OFFICE PERSONNEL.

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Management	Supervisory	Clerical	Prof.-Tech.
A1--Ability to comprehend and conceptualize the system of the organiztion or unit as a vast network or information flow and to understand as an employee one's position in the operation of the system.	x	x	x	x
B2--Ability to adjust quickly to new equipment, procedures, and work sequences brought about by rapid technological changes for the purpose of updating skills, increasing individual productive capacity, and raising company output.	x	x	x	x
B4--Ability to perform adequately in one system, switch to another system and perform adequately, and then switch back and perform adequately again. (Total job flexibility)	x	x	x	x
C3--Ability to recognize how inaccurate data entering a system may affect outcomes on succeeding jobs.	x	x	x	x
D1--Ability to gain rapport with all racial groups.	x	x	x	x
E2--Ability to communicate via data communication devices and to know the limitations, methods of utilization, and choose from available equipment for particular operations.	x	x	x	x
G2--Ability to input data in an on-line real-time system to obtain information for report preparation, office work production, and exception reporting.	x	x	x	x
G3--Ability to review information systems output to determine if there are errors.	x	x	x	x
G4--Ability to determine what happened to produce the results in an information system and to provide corrections of data, if needed.	x	x	x	x

APPENDIX A

TABLE 51. SECOND SEQUENCE OF TWENTY-ONE HIGH-PRIORITY ABILITIES PROPOSED FOR PREPARATION OF OFFICE PERSONNEL.

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Management	Supervisory	Clerical	Prof.-Tech.
G6--Ability to utilize contemporary record storage techniques including microfilm, microfiche, aperture cards, etc., including indexing and operating the system.		x	x	x
H1--Ability to operate various pieces of new equipment through self-instruction or in-service training. (MTST, Electronic Calculator, ATS, etc.)		x	x	x
H2--Ability to operate various computer data manipulation devices. (Input, Output, Storage, and Retrieval)		x	x	x
H3--Ability to operate microfilm and microfiche equipment.		x	x	x
I3--Ability to convert data to appropriate coding schemes.		x	x	x
I4--Ability to assemble and arrange input data for processing.		x	x	x
I1--Ability to write and execute information systems programs.		x		x
C1--Ability to analyze the needs, attitudes, motivations, and actions of others to facilitate the desired outcomes.	x	x		x
C2--Ability to interface between management and informational systems personnel.	x	x		x
E1--Ability to summarize output from information systems for the purpose of presenting management with concise reports.	x	x		x
E3--Ability to interpret and communicate the findings resulting from research studies.	x	x		x
F1--Ability to identify and select among a number of alternate combinations of equipment, procedures, and people for that combination which best accomplishes a certain established objective, purpose, or goal according to certain criteria.	x	x		x
F2--Ability to identify information needed by management for decision-making purposes.	x	x		x

TABLE 51 (continued)

High-Priority Emerging Ability	Ability Common to This Level of Personnel			
	Manage-ment	Super-visory	Cleri-cal	Prof.-Tech.
F3--Ability to formulate plans for collection, processing, storage, and retrieval of information to meet the needs of the organization.	x	x		x
F4--Ability to contribute to or conduct a feasibility study.	x	x		x
F5--Ability to contribute to or conduct cost effectiveness studies.	x	x		x
F6--Ability to ascertain what information should be programmed into an integrated information system.	x	x		x
F7--Ability to formulate standards, to measure performance, and to implement control activities, comparing results with expectations and reporting exceptions.	x	x		x
G1--Ability to construct basic flowcharts for projects, systems, or subsystems for purposes of planning, analyzing, implementing, controlling, and budgeting.	x	x		x
H4--Ability to ascertain and analyze the capabilities and functions of copying machines, data reproduction equipment, and data display terminals.	x	x		x
I2--Ability to locate information systems services and to select those that are appropriate.	x	x		x

APPENDIX B ☐☐☐☐

____________________Interviewer

NOBELS' INTERVIEW FORM

A. INFORMATION ABOUT COMPANY

1. COMPANY CONTACT PERSON/TITLE________________________________

Department__________________Telephone No.____________Ext._____

Address____
(Number) (Street)

____
(City) (County) (State) (Zip)

Wants summary of study? Yes______ No______

2. COMPANY____

Employing Unit - that is, the name of unit at this geographical site where this interview is held (e.g., name of plant or division)____________________________

3. SIZE - Check total number of all employees in above unit at this site: +100______ -100_______

4. STANDARD METROPOLITAN STATISTICAL AREA_______________________

5. STANDARD INDUSTRIAL CLASSIFICATION OF COMPANY AT THIS GEOGRAPHICAL SITE (Check one)

(1)____ Finance, Insurance, Real Estate
(2)____ Manufacturing
(3)____ Service
(4)____ Other-Agriculture/ Mining/Construction
(5)____ Transportation
(6)____ Communication and Utilities
(7)____ Wholesale/Retail Trade
(8)____ Federal, Education
(9)____ Federal, Noneducation
(10)____ State, Education
(11)____ State, Noneducation
(12)____ Local, Education
(13)____ Local, Noneducation

INTERVIEWER: YOU MAY WANT TO DESCRIBE NOBELS IN WORDS SIMILAR TO THE FOLLOWING TO THE COMPANY CONTACT AND/OR THE SUPERVISOR YOU INTERVIEW:

"IN NOBELS, NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM, WE ARE STUDYING THE TASKS THAT OFFICE WORKERS PERFORM IN THEIR JOBS. IN ORDER TO REVISE SCHOOL CURRICULUMS, WE NEED TO KNOW WHAT OFFICE WORKERS ACTUALLY DO AND WHAT MAKES THEM EFFECTIVE OR INEFFECTIVE."

"THESE FORMS ARE BEING CODED IN SUCH A WAY THAT THE INFORMATION YOU GIVE US CANNOT BE IDENTIFIED BY OTHERS IN YOUR COMPANY AND LATER CANNOT BE IDENTIFIED BY SPECIFIC COMPANY OR WORKERS."

Page 2 ☐☐☐☐

____________________Interviewer

B. INFORMATION FROM SUPERVISOR

6. SUPERVISOR NAME/TITLE____________________

Department____________________Telephone No.________Ext.________

Address (if different from above____________________

"SINCE YOU ARE THE SUPERVISOR OF A (JOB TITLE OF EMPLOYEE) WE FEEL YOU ARE ESPECIALLY WELL QUALIFIED TO TELL US ABOUT THE BASIC TASKS OF THE (JOB TITLE OF EMPLOYEE). DO YOU HAVE A WRITTEN JOB DESCRIPTION OF (EMPLOYEE'S) JOB?" IF YES, "MAY I HAVE A COPY?"

7. "BASIC TASKS CONSTITUTE THE CENTRAL PURPOSE OF THE JOB. THESE TASKS WOULD INCLUDE THE MOST DIFFICULT TASKS, THE MOST TIME CONSUMING TASKS, AND THE TASKS REQUIRING THE MOST RESPONSIBILITY ON THE PART OF THE WORKER."

	A. Consequences	B. Changing	C. Frequency	D. % Time Spent	E. Rank Tasks
1.					
2.					
3.					
4.					
5.					
6.					

DIRECTIONS:

1. ASK AND WRITE BASIC TASK NO. 1.
2. ASK AND WRITE A FOR BASIC TASK NO. 1.
3. PROCEED TO ASK AND WRITE FOR REMAINING TASKS AS OUTLINED IN 1 AND 2.
4. WHEN ALL TASKS AND A ARE FILLED IN, ASK INTERVIEWEE (REPEATING TASKS) B FOR ALL TASKS (NOTING AT BOTTOM IF "YES"), C FOR ALL TASKS, THEN D FOR ALL TASKS, AND FINALLY E—RANKING TASKS 1-6 BY DIFFICULTY.

INDICATE UNDERLINED CHOICE IN SQUARES:

A. GREAT 1 MODERATE 2 LITTLE 3

B. YES 1 NO 2

C. HIGH 1 MEDIUM 2 LOW 3

D. % FIGURE OF EMPLOYEE'S TOTAL TIME

E. MOST DIFFICULT 1 , NEXT MOST DIFFICULT 2 ,ETC.

Task No.____ B. How changing?____________________

Page 3

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____________________**Interviewer**

"THE NEXT FOUR QUESTIONS ASK FOR SPECIFIC INCIDENTS IN WHICH THIS EMPLOYEE HAS TAKEN PART ON HIS JOB. BY GETTING EACH OF THE PROSPECTIVE 1000 SUPERVISORS TO CITE SPECIFIC INCIDENTS FOR EACH OF THE FOUR QUESTIONS, WE WILL HAVE A LIST OF ACTUAL JOB HAPPENINGS TO USE AS CRITERIA IN EVALUATING PERFORMANCE."

"THE FIRST TWO QUESTIONS RELATE TO JOB PERFORMANCE OF A SPECIFIC BASIC TASK, AND THE NEXT TWO RELATE TO THE CONTACT HE HAS WITH OTHER PEOPLE IN HIS JOB."

8. "REGARDING JOB PERFORMANCE OF A BASIC TASK, WOULD YOU CITE A SPECIFIC INCIDENT WHEN THIS EMPLOYEE WAS PARTICULARLY EFFECTIVE IN PERFORMING THIS TASK?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" EFFECTIVE.) (RELATES TO TASK NO.____.)

9. "IN THE WORKER'S TASK OF (RECALL FROM TASK LIST) , YOU MENTION THAT AN ERROR COULD CAUSE (CHOOSE ONE WITH GREAT OR MODERATE) CONSEQUENCES. WOULD YOU CITE AN EXAMPLE WHEN THIS EMPLOYEE'S PERFORMANCE WAS A LITTLE LESS THAN PERFECT." (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" ERROR WAS MADE.) (RELATES TO TASK NO._____.)

10. "SINCE ASSUMING THIS JOB, THERE MUST HAVE BEEN TIMES WHEN THIS EMPLOYEE DID AN OUTSTANDING JOB OF WORKING WITH SOMEONE ELSE OR IN HANDLING A SITUATION WITH A CUSTOMER OR CLIENT EITHER FACE TO FACE OR ON THE PHONE. WOULD YOU CITE AN EXAMPLE AND TELL ME IN WHAT WAY THIS EMPLOYEE HANDLED THE SITUATION EFFECTIVELY?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" SUCCESSFUL.)

11. "NOW WOULD YOU GIVE ME AN INCIDENT WHEN THIS EMPLOYEE WAS A BIT LESS THAN 100 PERCENT EFFECTIVE IN HIS CONTACT WITH OTHER BUSINESS PEOPLE--EITHER IN THE OFFICE OR WITH YOUR BUSINESS CONTACTS?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" LESS THAN EFFECTIVE.)

Page 4
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____________________ Interviewer

C. INFORMATION FROM EMPLOYEE

"IN NOBELS, NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM, WE ARE STUDYING THE TASKS THAT YOU AND ALL OTHER OFFICE WORKERS PERFORM IN YOUR JOBS. TO REVISE SCHOOL CURRICULUMS, WE NEED FIRSTHAND INFORMATION ABOUT YOUR BASIC DUTIES AND HOW YOU PERFORM THEM."

"THESE FORMS ARE BEING CODED IN SUCH A WAY THAT THE INFORMATION YOU GIVE US CANNOT BE IDENTIFIED BY OTHERS IN YOUR COMPANY AND LATER CANNOT BE IDENTIFIED BY SPECIFIC COMPANY OR WORKERS."

12. NAME OF EMPLOYEE ______________________________
(Last) (First) (Middle Initial)

13. EMPLOYEE TELEPHONE - AREA CODE ________ NO. __________ EXT. ______

14. HOW LONG HAVE YOU BEEN EMPLOYED BY THIS COMPANY? ____________

15. WHAT IS YOUR PRESENT JOB TITLE? ____________________

16. HOW LONG HAVE YOU BEEN IN YOUR PRESENT JOB? ____________

17. WHAT WAS THE TITLE OF YOUR PREVIOUS JOB (if any)? ____________

18. HOW LONG WERE YOU IN YOUR PREVIOUS JOB? ____________

19. WHAT WOULD YOUR NEXT JOB BE IN LINE OF A PROMOTION? ________

20. WHEN MIGHT THIS PROMOTION OCCUR? ____________________

(Circle appropriate answers in 21, 22, 23, and 24.)

21. SEX OF EMPLOYEE: M F

22. AGE: 16 17 18 19 20 21 22 23 24

23. HIGHEST SCHOOL GRADE COMPLETED: K-8 9 10 11 12 13 14 15 16+

24. BACHELOR'S DEGREE: YES NO

Page 5 ☐☐☐☐

____________________Interviewer

25. **"IN THIS PROJECT WE ARE CONCERNED WITH THE BASIC TASKS WHICH CONSTITUTE THE CENTRAL PURPOSE OF YOUR JOB. THESE BASIC TASKS WOULD INCLUDE THE MOST DIFFICULT TASKS, THE MOST TIME CONSUMING TASKS, AND THE TASKS REQUIRING THE MOST RESPONSIBILITY ON YOUR PART."**

	A. Consequences	B. Changing	C. Frequency	D. % Time Spent	E. Rank Tasks
1.					
2.					
3.					
4.					
5.					
6.					

DIRECTIONS:

1. ASK AND WRITE BASIC TASK NO. 1.
2. ASK AND WRITE A FOR BASIC TASK NO. 1.
3. PROCEED TO ASK AND WRITE FOR REMAINING TASKS AS OUTLINED IN 1 AND 2.
4. WHEN ALL TASKS AND A ARE FILLED IN, ASK INTERVIEWEE (REPEATING TASKS) B FOR ALL TASKS (NOTING AT BOTTOM IF "YES"), C FOR ALL TASKS, THEN D FOR ALL TASKS, AND FINALLY E—RANKING TASKS 1-6 BY DIFFICULTY.

INDICATE UNDERLINED CHOICE IN SQUARES:

A. GREAT 1 MODERATE 2 LITTLE 3

B. YES 1 NO 2

C. HIGH 1 MEDIUM 2 LOW 3

D. % FIGURE OF EMPLOYEE'S TOTAL TIME

E. MOST DIFFICULT 1 , NEXT MOST DIFFICULT 2 ,ETC.

Task No.____ B. How Changing?______________________________

Page 6 ☐☐☐☐ ☐

Basic Task No. (as indicated
by employee and/or supervisor)
E_____ S_____

____________________ Interviewer

TASK DATA FOR PERFORMANCE GOAL WRITING

SUMMARY--TASK
BACKGROUND:

TASK:

(STEPS):

CONTINGENCIES OR
ALTERNATIVES:

CRITERIA:

INTERVIEWER: TO WRITE FINAL DATA SHEET FOR PERFORMANCE GOAL, YOU WILL NEED ANSWERS TO THE FOLLOWING QUESTIONS: (RESTATE TASKS FROM PAGE 4--IF NECESSARY FROM PAGE 2--TO WRITE UP THE SIX--MAXIMUM--PERFORMANCE STATEMENTS.)

1. (LISTED AS YOUR FIRST STEP) HOW DO YOU KNOW WHEN THIS TASK IS TO BE PERFORMED? (CUES AND SOURCE)
2. WHAT DOES THE EMPLOYEE DO IN PERFORMING THIS TASK?
3. WHAT TOOLS (EQUIPMENT), SPECIAL SUPPLIES, OR REFERENCE MATERIALS ARE NECESSARY FOR PERFORMING THIS TASK?
4. (LISTED AS YOUR FINAL STEP) HOW DO YOU KNOW WHEN YOU HAVE COMPLETED THE TASK?
5. WHAT KINDS AND LEVELS OF SPECIAL SKILLS ARE REQUIRED FOR THIS TASK?
6. WHAT ARE THE STANDARDS (OR CRITERIA) NECESSARY FOR SUCCESSFUL COMPLETION?
7. SPECIAL REQUIREMENTS FOR PERFORMANCE: DECISION MAKING? TECHNICAL VOCABULARY? PRESSURES (COPING)? CONSEQUENCES OF NOT PERFORMING SATISFACTORILY?

APPENDIX C

NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM (NOBELS)

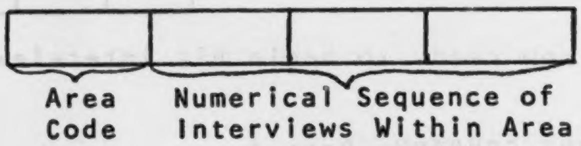
INSTRUCTIONS

FOR COLLECTING DATA AND WRITING PERFORMANCE STATEMENTS

June 1969

INSTRUCTIONS

CODING IN BOXES IN UPPER RIGHT-HAND CORNER OF EACH PAGE OF FORM:

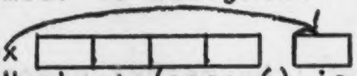


1 UCLA-West
2 University of Minn.-North
3 University of Georgia-South
4 State U. of N.Y.-East
5 Wayne State University

It is suggested that one person in each area be designated to keep a master list of all interviews scheduled. He would then assign each interview a new no. to be coded right to left in the 3 boxes above.

e.g., the first interview at UCLA	1	0	0	1
the first interview at N.Y.	4	0	0	1
the 25th interview at Ga.	3	0	2	5
the 52nd interview at Minn.	2	0	5	2

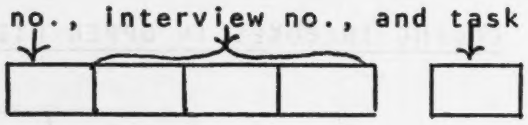
Code each page of Interview Form with all 4 code numbers as soon as interview number is assigned.

The fifth box  on the "Task Data for Performance Goal Writing" sheet (page 6) is to be numbered 1 to as many as 6 to correspond numerically with the number of the performance statement written. This number is not the basic task number (top left-hand corner--page 6), but the actual number (not to exceed six per case) of the performance statement written from all accumulated raw data.

e.g., Suppose the first interview has been completed in the New York area. The code for this interview is, following the above, 4001. Now suppose that the interviewer has accumulated 4 basic task statements from the supervisor and/or employee, the interviewer would then type (a copy of page 6) for the first task statement coding it 4001-1, the second task statement on another copy of page 6 4001-2, etc.

During the interview, the N.Y. interviewer may actually have filled out as many as 6 page 6's and numbered them 1-6, but in typing the final data decides he has only 4 task statements (the other 2 fitting into the 4 he finally submits). The interviewer would then submit 4 page 6's numbering them: 4001-1, 4001-2, 4001-3, and 4001-4.

After the interviewer fills in the area no., interview no., and task statement no., he then fills in his name on each sheet.



The interviewer is now ready to begin his interview.

PART A INFORMATION ABOUT COMPANY--Page 1

1. COMPANY CONTACT PERSON/TITLE e.g., Mrs. Lydia Rawlins, Manager

Department Personnel Telephone No. 313-6294 Ext. 596

Address 1035 Peachtree Street
(Number) (Street)

Atlanta Dekalb Georgia 30083
(City) (County) (State) (Zip)

Wants summary of study? Yes X No

Fill in each blank as each is significant, e.g., the county aids us in determining the Standard Metropolitan Statistical area although what the interviewer writes under the Standard Metropolitan Statistical area is the actual city in which he interviews...by code.

The company contact person is the person who arranges for interviews within the company--usually someone in Personnel. The NOBELS person who arranges the interview is responsible for filling in this section as illustrated above. (The summary will be sent after the study is completed this year.)

2. COMPANY e.g., Coca Cola Company (the mother company)

Employing Unit - that is, the name of unit at this geographical site where this interview is held
(e.g., name of plant or division) Coca Cola Bottling Division

3. SIZE - Check total number of all employees in above unit at this site: +100 X -100

According to the NOBELS proposal, page 29 no. 4, "Four-fifths of the data will be collected from firms employing 100 or more workers..." Therefore, 4 out of 5 companies chosen must employ +100 workers. Each area project director will be assigned a quota of companies of 100+ and 100- employees in which interviews will be scheduled.

Other specifications for interviews include (from Detroit-Metro Guidelines 6 and 7): "6. Within a department of a company, not more than one person in the same job classification will be selected. 7. Not more than seven workers will be selected from any one company. Not more than two of the workers can be in the same job classification."

4. STANDARD METROPOLITAN STATISTICAL AREA e.g., 1A8

(The 1A8 code was taken from the SMSA codes for the four areas--listed below in this set of instructions.)

According to the NOBELS proposal, page 29, no. 4, "Approximately seven-ninths of all field data will be collected from standard metropolitan statistical areas of 100,000 or more population..." The standard metropolitan statistical areas for the 4 immediate areas surrounding L.A., Minneapolis, Athens, and Albany are:

Area	SMSA Code	Actual Area
L.A.	1A7	Anaheim, Santa Ana, Garden Grove
	1A9	Bakersfield
	1A42	Fresno
	2A1	L.A.-Long Beach
	2A29	Sacramento
	2A33	San Bernadino, Riverside, Ontario
	2A34	San Diego
	2A35	San Francisco-Oakland
	2A36	San Jose
	2B36	Salinas-Monterey
	2B38	Santa Barbara
	2B49	Stockton
	2B56	Vallejo-Napa
Minneapolis	1A36	Duluth, Minn.-Superior, Wisc.
	2A6	Minneapolis-St. Paul, Minn.
Athens	1A8	Atlanta, Ga.
	1A23	Chatanooga, Tenn.
	1A58	Knoxville, Tenn.
	2A8	Nashville, Tenn.
	1B11	Augusta, Ga.
	1B24	Columbus, Ga.
	1B62	Macon, Ga.
	2B39	Savannah, Ga.
Albany	1A4	Albany, Schenectady, Troy, N.Y.
	1A12	Binghamton, N.Y.
	1A15	Boston, Mass.
	2A12	New York, N.Y.
	2A43	Syracuse, N.Y.
	2A50	Utica-Rome, N.Y.

We would encourage you to conduct your interviews in other metropolitan areas within limitations of budget. If you do interview in areas other than those listed, just write in the name of the city or cities remembering that they must have more than 100,000 population. If you are in doubt as to whether a particular city qualifies, write us and we will let you know.

5. STANDARD INDUSTRIAL CLASSIFICATION OF COMPANY AT THIS GEOGRAPHICAL SITE (Check one)

(1)____ Finance, Insurance, Real Estate
e.g., (2) X Manufacturing
(3)____ Service
(4)____ Other-Agriculture/ Mining/Construction
(5)____ Transportation
(6)____ Communication and Utilities
(7)____ Wholesale/Retail Trade
(8)____ Federal, Education
(9)____ Federal, Noneducation
(10)____ State, Education
(11)____ State, Noneducation
(12)____ Local, Education
(13)____ Local, Noneducation

Check the classification into which the geographical unit of this company falls and not the particular department in which you are interviewing. If you were interviewing at the central switchboard of the Buick Motor Division of General Motors Corporation, you would check "Manufacturing" and not "Communication and Utilities."

INTERVIEWER: YOU MAY WANT TO DESCRIBE NOBELS IN WORDS SIMILAR TO THE FOLLOWING TO THE COMPANY CONTACT AND/OR THE SUPERVISOR YOU INTERVIEW:

"IN NOBELS, NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM, WE ARE STUDYING THE TASKS THAT OFFICE WORKERS PERFORM IN THEIR JOBS. IN ORDER TO REVISE SCHOOL CURRICULUMS, WE NEED TO KNOW WHAT OFFICE WORKERS ACTUALLY DO AND WHAT MAKES THEM EFFECTIVE OR INEFFECTIVE."

"THESE FORMS ARE BEING CODED IN SUCH A WAY THAT THE INFORMATION YOU GIVE US CANNOT BE IDENTIFIED BY OTHERS IN YOUR COMPANY AND LATER CANNOT BE IDENTIFIED BY SPECIFIC COMPANY OR WORKERS."

Memorize the above paragraphs and the similar introduction to the employee on page 4 of the NOBELS form for use in introducing NOBELS to anyone you interview. All items in microtype on NOBELS form (in manifold type here in instructions) are either instructions to aid the interviewer or wording to be memorized by the interviewer before his first interview. Facility in recalling the exact wording of the questions is imperative to a smooth interview.

PART B INFORMATION FROM SUPERVISOR--Page 2

6. SUPERVISOR NAME/TITLE e.g., William Jones, Supervisor

Department Sales Telephone No. 343-6294 Ext. 601

Address (if different from above) 101 S. Peachtree, Atlanta

The interviewer will speak with both the supervisor and the employee. The NOBELS interview Form has been set up so that the supervisor will be interviewed first and following him the employee. (Also, from the Detroit-Metro Guidelines, "1. Because of absenteeism, have a back-up person selected to be interviewed.")

Upon entering the supervisor's office, the interviewer will verify the information in no. 6 if already filled in or fill in the blanks by asking the supervisor for the information.

The interviewer should memorize the following paragraph and know the job title of the employee well enough so he can insert it in the proper places without hesitating.

> "SINCE YOU ARE THE SUPERVISOR OF A (JOB TITLE OF EMPLOYEE) WE FEEL YOU ARE ESPECIALLY WELL QUALIFIED TO TELL US ABOUT THE BASIC TASKS OF THE (JOB TITLE OF EMPLOYEE). DO YOU HAVE A WRITTEN JOB DESCRIPTION OF (EMPLOYEE'S) JOB?" IF YES, "MAY I HAVE A COPY?"

The Detroit-Metro Guidelines state, "8. Data collectors are urged to support interview data with job descriptions, work samples, and forms as an aid for preparing performance goal data."

If the supervisor gives the interviewer a job description sheet, it is suggested the interviewer preface the basic task introduction in no. 7 with, "Using this job description sheet as it applies to this particular job, let's discuss this employee's basic tasks..."

7. "BASIC TASKS CONSTITUTE THE CENTRAL PURPOSE OF THE JOB. THESE TASKS WOULD INCLUDE THE MOST DIFFICULT TASKS, THE MOST TIME CONSUMING TASKS, AND THE TASKS REQUIRING THE MOST RESPONSIBILITY ON THE PART OF THE WORKER."

Detroit-Metro Guidelines state, "10. Basic tasks are defined by the supervisor or employee as those activities that constitute the major purpose of the job. For purposes of NOBELS, not more than six activities will be identified as basic."

Follow directions given on the bottom of page 2. After the introductory paragraph in no. 7, the interviewer states, "Now would you give me one of this employee's basic tasks." The supervisor might answer, "She takes my dictation and types up the letters for my signature."

The interviewer writes the supervisor's response on the left-hand side of the page by no. 1 and proceeds to square A in which he lists the correct numerical code according to the following definitions: e.g.,

	A	B	C	D	E
1. She takes my dictation and types up the letters for my signature.	2	2	1	50	3

NOTE: MEMORIZE QUESTION-AND-ANSWER CHOICES. The wording on the NOBELS interview form for A-E is merely a cue to the interviewer. The wording of the question-and-answer choices appears in full only here in the instructions.

A Consequences

Question: "How would you evaluate the effect of an employee's error or the employee's failure to perform this task or a portion of it related to company financial loss or effects on people inside or outside your company? Would you say the error would bear:

Answer Choices:	Great consequences	1
	Moderate consequences	2
	Little if any consequences"	3

Now ask additional basic tasks and A for each task as it is mentioned. When all tasks and all A's are listed, proceed with B, C, D, and E as follows:

B Changing

Question: "Of all the tasks listed, do you see any of these tasks changing in the near future?" (Share what you have written on basic tasks with the supervisor to permit him to answer more easily on B-E.)

Answer Choices: Yes 1 No 2

If the supervisor says a task is changing, ask "How changing?" and fill in answer at the bottom of page 2. DO NOT PROBE FOR EXISTING TASKS THAT SUPERVISOR SAYS ARE CHANGING. No data for performance statements (page 6) will be written up for old tasks that the supervisor says will shortly cease to exist.

C Frequency

Question: "Of all the tasks listed, how would you evaluate each as to frequency of performance?

Answer Choices	Is this among the tasks most frequently performed?	1
	Is this among tasks performed with medium frequency?	2
	Is this infrequently performed--once in a long while?"	3

Fill in C for all basic task information given. D is asked for all tasks listed after C is completed.

D Time Spent

Question: "What percent of this employee's total time does she spend on (state tasks in order given)?"

Answer Choices: 1%-100%

A quick check by the interviewer after D is completed for all tasks listed should indicate a percent total at or near 100%. A total more than 10 percentage points off 100 results in the interviewer asking the interviewee which item(s) he would like to adjust to come closer to an actual 100.

E Rank Tasks

Question: "Would you now rank the tasks you have mentioned in order of difficulty?" (It may be necessary to repeat tasks.)

Answer	Most difficult	1	
Choices:	Next most difficult	2	(This is done for 6 or however many tasks listed.)
	Next most difficult	3	
	Next most difficult	4	
	Next most difficult	5	
	Next most difficult	6	

After completing E, the interviewer now proceeds to page 3 to elicit specific incidents from the supervisor.

INTERACTION INCIDENTS FROM SUPERVISOR--Page 3

Page 3 is entirely in microtype implying that the interviewer know word for word the introductory paragraphs and the specific questions.

> "THE NEXT FOUR QUESTIONS ASK FOR SPECIFIC INCIDENTS IN WHICH THIS EMPLOYEE HAS TAKEN PART ON HIS JOB. BY GETTING EACH OF THE PROSPECTIVE 1,000 SUPERVISORS TO CITE SPECIFIC INCIDENTS FOR EACH OF THE FOUR QUESTIONS, WE WILL HAVE A LIST OF ACTUAL JOB HAPPENINGS TO USE AS CRITERIA IN EVALUATING PERFORMANCE."
>
> "THE FIRST TWO QUESTIONS RELATE TO JOB PERFORMANCE OF A SPECIFIC BASIC TASK, AND THE NEXT TWO RELATE TO THE CONTACT HE HAS WITH OTHER PEOPLE IN HIS JOB."

8. "REGARDING JOB PERFORMANCE OF A BASIC TASK, WOULD YOU CITE A SPECIFIC INCIDENT WHEN THIS EMPLOYEE WAS PARTICULARLY EFFECTIVE IN PERFORMING THIS TASK?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" EFFECTIVE.) (RELATES TO TASK NO.____.)

This must be a specific incident. Permit the supervisor to see what you have written for the basic tasks so he may more easily choose to which task he wishes to relate a specific incident. Enter the basic task number in the space provided in question no. 8.

If the supervisor is general and not specific; e.g., "She types very well," repeat what he has said as the beginning of the answer you wish. "You say, 'She types very well;' and what exactly has she typed so well that would make you cite her typing as indicative of effective performance?" Rather than ask "what," the interviewer could phrase his question, "Would you recall a specific incident when her typing particularly impressed you?"

If the supervisor does not state any incident for a basic task, probe with, "Perhaps you cannot recall a specific incident when this employee was particularly effective in performing one of these tasks, but would you give me an incident when anyone employed by you as a (employee's job title) was particularly effective in performing one of these basic tasks?"

Then probe for the "why" effective.

Examples of probes here would include, "You say she did such an excellent job of preparing and typing up the recap of your Massachusetts sales territory that your salesman phoned you to tell you he thought it was the best recap he'd ever received. Why do you think she did such an excellent job here?" This could also be phrased, "What is it that made her do such an outstanding job on this recap?"

An acceptable answer to "why" might be, "She doesn't just do a job because it is assigned. She actually tries to understand what the salesman wants to use the information for and then constructs the information so that it will be of the maximum help to him."

9. "IN THE WORKER'S TASK OF (RECALL FROM TASK LIST), YOU MENTION THAT AN ERROR COULD CAUSE (CHOOSE ONE WITH GREAT OR MODERATE) CONSEQUENCES. WOULD YOU CITE AN EXAMPLE WHEN THIS EMPLOYEE'S PERFORMANCE WAS A LITTLE LESS THAN PERFECT." (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY ERROR WAS MADE.) (RELATES TO TASK NO.___.)

This must be a specific incident. Again, show the supervisor the basic task information you have just filled in as you ask the above question. Enter the basic task number to which the answer refers in the space provided in question no. 9.

If the supervisor does not give an answer, probe with, "In extending invoices which you cite as a task in which an error could cause great consequences, could you give me an incident when anyone extended incorrectly and what happened."

If the supervisor still gives no answer or if only "little consequences" were listed for all basic tasks, ask the supervisor for any incident on job performance of anyone employed as a (employee's job title) who ever made a mistake.

Then probe "why" he feels the employee made the error.

An acceptable answer would be, "If she does more than two or three hours of extensions, she gets careless and doesn't double check her answers."

10. "SINCE ASSUMING THIS JOB, THERE MUST HAVE BEEN TIMES WHEN THIS EMPLOYEE DID AN OUTSTANDING JOB OF WORKING WITH SOMEONE ELSE OR IN HANDLING A SITUATION WITH A CUSTOMER OR CLIENT EITHER FACE TO FACE OR ON THE PHONE. WOULD YOU CITE AN EXAMPLE AND TELL ME IN WHAT WAY THIS EMPLOYEE HANDLED THE SITUATION EFFECTIVELY?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY"SUCCESSFUL.)

This incident must be specific. A typically unsatisfactory answer from a supervisor to question no. 10 is, "She just works well with people." Another might be, "She handles customers in a satisfactory manner." If the supervisor begins in such a general manner, probe.

Probes include:

"You say she works well with people. Could you relate a recent incident when she did work especially well with someone inside or outside your company?"

If the supervisor does not state a specific incident or says he can't think of any when you first ask the question, restate the question as follows:

"Recalling a recent incident when this employee was quite successful in working with people might be difficult to state at a moment's notice. However, could you tell me about an outstanding incident of any other employee you supervisewwho is a (title of employee) or any previous (title of employee) you have supervised when the employee worked well with other people?"

Then probe the "why" successful.

"Can you pinpoint why you think she was successful in this instance?"

Acceptable answers would be:

"Last week one of her co-workers, who had a rush typing job, asked her for help, and she gave it willingly. She also managed to get all my work done even though she spent over two hours on the other employee's typing job. She can add that extra spurt when it is needed." (the "why" successful) and

"Yesterday an account called to tell me how much he appreciated the help my secretary gave him with his order while I was out of town.

She can assemble facts quickly and communicate them to the understanding of the party concerned." (the "why" successful)

11. "NOW WOULD YOU GIVE ME AN INCIDENT WHEN THIS EMPLOYEE WAS A BIT LESS THAN 100 PERCENT EFFECTIVE IN HIS CONTACT WITH OTHER BUSINESS PEOPLE--EITHER IN THE OFFICE OR WITH YOUR BUSINESS CONTACTS?" (INTERVIEWER: PROBE FOR SPECIFIC INCIDENT. PROBE FOR "WHY" LESS THAN EFFECTIVE.)

This must be a specific incident. If the answer is, "She is an excellent worker and I can't think of anything she does that is ineffective" or "Her errors must be minor because I really can't recall one," then the interviewer might proceed with:

"As none of us is perfect and we often make mistakes when we are first learning a job, would you cite a specific incident when this employee or any other person in this job classification has done anything the least bit ineffective in dealing with other business people either inside or outside your company?" or

"Even though an ineffective contact with other business people might be ever so slight, your telling us about it would help us list all these incidents and structure school work so that these errors might be eliminated in the future. Would you cite any incident at all when this worker or another working in the capacity of a (title of employee) was slightly ineffective in his contacts with any business person?"

Now probe for "why" less than effective; e.g., "Why do you consider this incident to be ineffective?"

Acceptable answers would be:

"She didn't get back to someone who was waiting to speak with me on the phone last week. The person had to hang up and try again. She has a tendency to goof on followup." (the "why" ineffective) and

"She was rude to a student who asked her a question when she was busy with the end-of-the-month billing last Friday. When she works under pressure, she lets other people feel she doesn't want to be bothered with anything else." (the "why" ineffective)

If the interviewer has any incident not filled in, it is suggested that he courteously express the importance of completeness of the form and request permission to call the supervisor (state a specific time and date) and get the information needed after the supervisor has had time to think about job or social interaction incidents and might recall one that presently does not come to mind.

PART C. INFORMATION FROM EMPLOYEE--Page 4

The interviewer introduces himself and recites the next two paragraphs to acquaint the employee with NOBELS.

"IN NOBELS, NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM, WE ARE STUDYING THE TASKS THAT YOU AND ALL OTHER OFFICE WORKERS PERFORM IN YOUR JOBS. TO REVISE SCHOOL CURRICULUMS, WE NEED FIRSTHAND INFORMATION ABOUT YOUR BASIC DUTIES AND HOW YOU PERFORM THEM."

"THESE FORMS ARE BEING CODED IN SUCH A WAY THAT THE INFORMATION YOU GIVE US CANNOT BE IDENTIFIED BY OTHERS IN YOUR COMPANY AND LATER CANNOT BE IDENTIFIED BY SPECIFIC COMPANY OR WORKERS."

Now ask questions 12-24.

12. NAME OF EMPLOYEE____
(Last) (First) (Middle Initial)

13. EMPLOYEE TELEPHONE - AREA CODE_______NO.____________EXT._______

14. HOW LONG HAVE YOU BEEN EMPLOYED BY THIS COMPANY?____________

15. WHAT IS YOUR PRESENT JOB TITLE?________________________

16. HOW LONG HAVE YOU BEEN IN YOUR PRESENT JOB?________________

17. WHAT WAS THE TITLE OF YOUR PREVIOUS JOB (if any)?___________

18. HOW LONG WERE YOU IN YOUR PREVIOUS JOB?____________________

19. WHAT WOULD YOUR NEXT JOB BE IN LINE OF A PROMOTION?_________

20. WHEN MIGHT THIS PROMOTION OCCUR?_________________________

(Circle appropriate answers in 21, 22, 23, and 24.)

21. SEX OF EMPLOYEE: M F

22. AGE: 16 17 18 19 20 21 22 23 24

23. HIGHEST SCHOOL GRADE COMPLETED: K-8 9 10 11 12 13 14 15 16+

24. BACHELOR'S DEGREE: YES NO

NOTE: Questions 21-24 are checks for the following specifications in the NOBELS proposal:

a. 2 females interviewed to every 1 male interviewed
b. Interviewee must be 16-24 years of age
c. Cannot hold 4-year degree or higher

The interviewer in finishing page 4 with the employee, now proceeds to page 5 to ask the employee his basic tasks.

The format for asking for this information is the same as that followed with the supervisor when page 2 was filled out. After completing page 5 with the employee, the interviewer now probes each basic task by filling in copies of page 6.

TASK DATA FOR PERFORMANCE GOAL WRITING--Page 6

A task is basic if it has been mentioned by either the supervisor and/or the employee. If the employee does not mention all that the supervisor mentions, the interviewer might probe for tasks the supervisor mentions if the employee mentions less than six or the six she mentions look as if they might be combined into fewer tasks.

Fill in on page 6 in the upper left-hand corner the no. of the task as given on page(s) 2 and/or 5 and who gave it--E (employee) and/or S (supervisor).

REMEMBER: A task has meaning in and of itself to the employee. Do not combine such tasks as (a) receives incoming phone calls and (b) makes luncheon reservations--because you consider them "clerical duties" or "receptionist duties." If you decide each is a basic task, then each must have its own writeup on a separate sheet. If one or the other is not basic, then it will not be written up. Whatever the decision, unlike tasks cannot be combined in one Task Data Sheet unless the tasks are part of a process, and it is the process that has meaning in and of itself to the employee. If "Processing invoices" is a task that has meaning in and of itself to the employee and using the following questions found at the bottom of page 6 as guidelines for probing and writing up the raw data, the interviewer might get the response which follows (after the questions):

INTERVIEWER: TO WRITE FINAL DATA SHEET FOR PERFORMANCE GOAL, YOU WILL NEED ANSWERS TO THE FOLLOWING QUESTIONS: (RESTATE TASKS FROM PAGE 5--IF NECESSARY FROM PAGE 2--TO WRITE UP THE SIX--MAXIMUM--PERFORMANCE STATEMENTS.)

1. (LISTED AS YOUR FIRST STEP) HOW DO YOU KNOW WHEN THIS TASK IS TO BE PERFORMED? (CUES AND SOURCE)
2. WHAT DOES THE EMPLOYEE DO IN PERFORMING THIS TASK?
3. WHAT TOOLS (EQUIPMENT), SPECIAL SUPPLIES, OR REFERENCE MATERIALS ARE NECESSARY FOR PERFORMING THIS TASK?
4. (LISTED AS YOUR FINAL STEP) HOW DO YOU KNOW WHEN YOU HAVE COMPLETED THE TASK?
5. WHAT KINDS AND LEVELS OF SPECIAL SKILLS ARE REQUIRED FOR THIS TASK?
6. WHAT ARE THE STANDARDS (OR CRITERIA) NECESSARY FOR SUCCESSFUL COMPLETION?
7. SPECIAL REQUIREMENTS FOR PERFORMANCE: DECISION MAKING? TECHNICAL VOCABULARY? PRESSURES (COPING)? CONSEQUENCES OF NOT PERFORMING SATISFACTORILY?

IT IS EXTREMELY IMPORTANT THAT THE INTERVIEWER ATTEMPTS AT ALL TIMES TO CAPTURE THE TASK AS THE EMPLOYEE INTERVIEWED ACTUALLY PERFORMS IT AS EXPLAINED BY THE EMPLOYEE. THE INTERVIEWER IS NOT TO ADD ANYTHING WHICH IS NOT TOLD HIM BY THE EMPLOYEE.

"Processing invoices" might be written by the interviewer as follows:

SUMMARY--TASK BACKGROUND: Customers send orders to home office in another state. If home office approves orders, orders are teletyped to worker's office.

TASK: The worker process invoices.

(STEPS):

1. Receives customers' orders on teletype from home office
2. Types 14-part snap-out invoice
3. Sends bill of lading copy of invoice to shipping department
4. Sends out customers' and salesmen's acknowledgements in window envelopes
5. Receives bill of lading copy from shipping department when order is shipped
6. Computes extensions on printing calculator
7. Types extensions on invoices
8. Proofreads all numbers with other employee
9. Mails copies to home office, customers, and salesmen
10. Files control copy in numerical file to conclude task

CONTINGENCIES OR ALTERNATIVES: Instead of step 8, supervisor checks invoices if many invoices are typed.

CRITERIA: Must operate printing calculator and proofread correctly. Customers express dissatisfaction if billed incorrectly.

Most of your tasks will fall into the following seven categories which were selected by classifying the first 1500 performance statements of the NOBELS pilot study.

1. Mailing
2. Duplicating
3. Filing
4. Recording (includes manipulating numbers)
5. Typewriting
6. Automatic and Electronic Data Processing
7. Personal Interacting

By "falling into" these categories, it is implied that the major activity of the performance statement fits into one of the categories--although the steps may actually be actions found in other categories.

For example, task verbs under no. 4 Recording (includes manipulating numbers) are presently: posts, verifies, compiles, issues, updates, processes, fills in/out, evaluates, corrects, computes, and balances. The verbs in the steps of no. 4 tasks could come from any of the seven categories.

In writing up Task Data for Performance Goal Writing taking the first basic task mentioned by the employee, the interviewer uses the questions at the bottom of page 6 as his constant guide.

Summary--Task Background:

This is the foundation upon which the task statement and subsequent steps are built. It states in a sentence or two the conditions which led to the point at which the worker assumes his task. These few words set the scene for whoever reads the task data.

SUMMARY--TASK BACKGROUND: Mail is brought up from mail room twice daily (9:00 a.m. and 1:00 p.m.) and given to employee. Outgoing mail is picked up twice daily (11:00 a.m. and 5:00 p.m.).

Task:

This statement begins with "The worker" and follows immediately with one or two action verbs in the present tense which best describe the major activity of the task.

e.g., The worker files the day's answered correspondence.
The worker retrieves auto accident records from policyholders' files.

The Detroit-Metro Guidelines stress, "4. Commonality of terminology desirable. We recommend the use of the Taxonomy of Office Activities for Business and Office Education as a source helpful in standardizing terminology." For commonality of all task statements written, use the present tense of the action verb.

Do not use:	Use:
to identify identifying	identifies
to open opening	opens

Following the action verb is the object or objects which receive the action. Be specific enough to identify the objects to the clarification of the reader. Do not use brand names for tools and equipment but state type of tools and equipment (e.g., use "photocopy machine" instead of Xerox).

Do not use:	Use:
files material	files letters, memos, and reports
checks cards	checks IBM punched cards

e.g.,

	A	B	C	D	E
1. Takes care of mail	3	2	1	10	6

The task for this first basic task mentioned by the employee could be:

TASK: The worker distributes incoming mail and collects outgoing mail.

The Detroit-Metro Guidelines mention, "11. Key steps indicate the sequence of activities making up the task." Therefore, the proper order here will bring the steps into view.

(Steps):

Again, referring to the questions at the bottom of page 6, it is imperative that the interviewer probe for task data getting the answers to these questions. Questions 1-4 are for Steps; 5-7 are for the Criteria.

The first step (question 1) written in final form will tell any reader how the worker knows he is to perform this task.

e.g., Steps
1. Opens mail (as soon as mailboy brings it) with electric letter opener.

Questions 2 and 3 note the information necessary in writing up the steps.

e.g.,
2. Date stamps all mail
3. Scans contents
4. Sorts mail by recipients
5. Distributes all mail other than requests for product information
6. Fills and sends out requests for product
7. Collects all mail twice daily from department's outbaskets
8. Deposits outgoing mail in inter-company truck outside department

Contingencies or Alternatives:

These are the steps which slightly change the normal routine of performing a task.

e.g., Alternative
Does not open "Personal" mail, but date stamps the envelope.

Criteria:

Questions 5-7 ask for information that will lead to establishing criteria.

e.g., Criteria	Incoming mail reaches correct persons and routine inquiries are handled promptly. All outgoing mail from department must be placed in truck or deposited in safe overnight before the worker leaves for the day.

The criteria are to be elicited from the employee, and the interviewer is not to insert here either his own or what he feels are obvious or acceptable criteria.

PREPARING FINAL COPY OF TASK DATA FOR PERFORMANCE GOAL WRITING SHEETS

In writing the final copy of page six for each basic task (not more than 6), the answers to the questions at the bottom of page 6 should be in the Summary, Task, Steps, Contingencies or Alternatives and Criteria. Do not merely answer these questions but incorporate the answers in the parts of the Task Data for Performance Goal Writing.

Be certain to mention tools and machines used in the steps as well as the task statement.

In using abbreviations on the Performance Goal Writing Sheets, the writer must spell the word the first time it is used and place the abbreviation in brackets behind the word. Thereafter the abbreviation may be used alone.

The writer must use terminology easily understandable to any business teacher who might read these performance goal writing statements.

It is suggested that the performance goal writing sheets be written up as soon as possible after each interview. After each case is completed, the interviewer is urged to turn it in to the person in charge in his area.

PREPARING NOBELS MATERIALS FOR MAILING TO DETROIT

According to the Detroit-Metro Guidelines, the following statements pertain to the final processing of NOBELS materials in each of the areas before sending them on to Detroit:

> Project directors are urged to check data collectors' work: a. delete personal names, b. use action verbs in task statements and state steps.
> Project director reviews all cases for adequacy prior to sending them to Wayne State University.
> All reports sent to project director at Wayne State University to be typewritten.
> Project directors are urged to send by first-class mail 10 to 25 cases in a package. Address the package:

NOBELS
c/o Mrs. E. J. Weber
1107 Edgewood Avenue
Ann Arbor, Michigan 48103

It is agreed, of course, that you will photocopy and retain the photocopy for your own reports and reporting. The photocopy is also insurance against loss in the mail.

Verb Classification

CODE	WORD	SYNONYMS
	accumulate	- collect 051
003	activate	- operate, start, turn on
006	add	
009	adjust	- change, set
	advise	- inform 147
	affix	- attach 024
	alert	- inform 147
	annotate	- note 192
012	answer	
015	arrange	- negotiate, plan, schedule, straighten
	ask	- inquire 150, request 252
	assemble	- collect 051
018	assign	
021	assist	
024	attach	- affix, clip, staple
	balance	- reconcile 234
027	batch	
030	bind	- tie
	block in	- arrange 015
	block out	- flowchart 138
	break down	- sort 282
	calculate	- compute 066
033	call	- page, telephone
	carry out	- perform 204
	change	- adjust 009
036	check	- examine, inspect
	choose	- select 273
039	clean	- dust, tidy
	clip	- attach 024, cut 081
042	close	
045	code	
048	collate	
051	collect	- accumulate, assemble, gather
054	compare	- match
057	compile	- make/set up
060	complete	- fill in/out
063	compose	- make up
066	compute	- calculate, figure
	confer	- discuss 108
	confirm	- verify 312
069	connect	
	consult	- discuss 108
072	convert	
	copy	- duplicate 120
075	correct	- change, debug, fix, update, upgrade
078	count	
081	cut	- clip
084	deactivate	- turn off
	debug	- correct 075
	decide	- determine 096
	delete	- remove 246
087	deliver	- give, hand to, present, submit
090	deposit	
	describe	- explain 126
	design	- devise 099
093	destroy	- discard, purge, throw away
096	determine	- decide
099	devise	- design
102	direct	- show, take
105	disburse	- pay
	discard	- destroy 093
108	discuss	- confer, consult, talk with
111	distribute	- give to, hand
114	divide	
117	draw	- sketch
120	duplicate	- copy, mimeograph, photocopy, Xerox
	dust	- clean 039
	enter	- record 237
	erase	- remove 246
123	evaluate	- grade, score
	examine	- check 036
126	explain	- describe
129	extend	
	extract	- pull 222
132	feed	- put into, thread
	figure	- compute 066
135	file	
	fill in/out	- complete 060

CODE	WORD	SYNONYMS	CODE	WORD	SYNONYMS
	find	- locate 174		look for	- search 270
	fix	- correct 075	180	mail	
138	flowchart	- block out		mimeograph	- duplicate 120
	fold	- [no educational significance]	183	maintain	- keep
	formulate	- devise 099		make	- compile 057
	forward	- send 276		make note of	- note 192
	gather	- collect 051		make up	- compose 063
	get	- obtain 195		mark	- label 165, write 324
	give back	- return 255		match	- compare 054
	give direction	- instruct 156	186	move	
	give to	- deliver 087, distribute 111	189	multiply	
	go	- travel 306		negotiate	- arrange 015
	go through	- search 270		notations	- note 192
	grade	- evaluate 123	192	note	- annotate, make note of, notation, notice
141	greet	- welcome		notice	- note 192
	hand to	- deliver 087		notify	- inform 147
	handwrite	- write 324	195	obtain	- [fetch], get, pick up, secure
144	hold	- keep, store	198	open	
	identify	- determine 096, inform 147		operate	- activate 003
	index	- sort 282	201	oversee	- supervise
147	inform	- advise, alert, identify, notify, relate, remind, signal, [suggest] tell		package	- wrap 321
	initial	- sign 279		page	- call 033
150	inquire	- ask		pay	- disburse 103
153	insert	- put in, stuff	204	perform	- carry out
	inspect	- check 036		phone	- call 033
156	instruct	- give direction, show, teach		photocopy	- duplicate 120
159	interview		207	photograph	
162	issue			pick up	
	journalize	- record 237	210	place	- put
	keep	- hold 144, maintain 183		plan	- arrange 015
165	label	- mark, tag	213	post	- [to ledger only]
168	list			present	- deliver 087
171	load	- reload, unload	216	proofread	
174	locate	- find	219	provide	- supply
177	lock		222	pull	- extract, take from
	log	- record 237	225	punch	- keypunch
	look at/on/up	- refer 240		purge	- destroy 093
				put	- place 210
				put into	- feed 132, insert 153
			228	quote	
				read	- scan 267
			231	receive	- take
			234	reconcile	- balance
			237	record	- enter, journalize, log

CODE	WORD	SYNONYMS
240	refer	look at/on/up, relay, turn over
243	refuse	reject, turn away
	reiterate	repeat 249
	relate	inform 147
	remind	inform 147
246	remove	delete, erase, take off
249	repeat	reiterate, tell again
252	request	ask
255	return	give back
	review	scan 267
258	route	
261	run tape	
264	run through	
267	scan	read, review
	schedule	arrange 015
	score	evaluate 123
	seal	[no educational significance]
270	search	go through, look for/up, trace
	secure	obtain 195
273	select	choose
276	send	forward, transmit
	separate	sort 282
	set	adjust 009, compile 057
	show	direct 102, instruct 156
279	sign	initial
	signal	inform 147
	sketch	draw 117
282	sort	break down, index, separate, weed
285	stamp	
	staple	attach 024
	start	activate 003
	store	hold 144
	straighten	arrange 015
	stuff	insert 153
	submit	deliver 087
288	subtract	
	supervise	oversee 201
	supply	provide 219
	switch	transfer 303
	tag	label 165
	take	direct 102, receive 231
291	take dictation	
	take from	pull 222, receive 231
	take off	remove 246
	talk with	discuss 108
	teach	instruct 156
	telephone	call 033
	tell	inform 147
	tell again	repeat 249
294	test	[administer] test
	thread	feed 132
	throw away	destroy 093
	tidy	clean 039
	tie	bind 030
297	total	
	trace	search 270
300	transcribe	
303	transfer	switch
	transmit	send 276
	transport	travel 306
306	travel	go, transport
	turn away	refuse 243
	turn off	deactivate 084
	turn on	activate 003
	turn over	refer 240
309	typewrite	type
	update	correct 075
	upgrade	correct 075
312	verify	confirm
	weed	sort 282
315	weigh	
	welcome	greet 141
318	wire	
	witness	oversee 201
321	wrap	package
324	write	handwrite, mark
	Xerox	duplicate 120

APPENDIX D

NOBELS Action Verbs and Synonyms

How to Read the NOBELS Verb List

The primary verbs are reported alphabetically in the master NOBELS listing with definitions, examples, and synonyms classified thereunder. The frequency of occurrence in a total of 32,447 verbs and the rank of each of 57 primary verbs classified are also given. All underlined primary verbs and synonyms in the NOBELS Action Verbs and Synonyms were not included in the Index of the Taxonomy of Office Activities.

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
53	add	to increase in number, size, or importance	137
		"Add items to inventory sheet that have been added to inventory."	
		"Add checks from register and remove tape."	
47	adjust	to bring to a more satisfactory state . .	159
		"Adjusts counter for desired number of copies."	
	change	"Change old procedure as required by new procedure."	
	set	"Set computer for proper itemization of charges."	
19	answer	to speak, write, or reply	501
		"Answers incoming telephone calls."	
31	arrange	to put into correct or desired order . . .	374
		"Arrange appointment to his satisfaction."	
	block in/out	"Blocks in reservations of rooms."	
	collate	"Collates paper pack."	
	design	"Designs new form in rough draft."	
	devise	"Devise the best form for tabulation."	
	flowchart	"Flowchart program using layout and spacing chart."	
	negotiate	"Negotiates solution or refers guests to manager."	
	plan	"Plans for three inspections daily."	
	schedule	"Schedules appointment for salesman."	
	straighten	"Straighten up pamphlets."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
16	attach	to make fast or join	525
		"Attach signed original to patient's chart."	
	affix	"Affix postage stamp on envelope."	
	clip	"Clip these two items together."	
	staple	"Staple report to original ticket."	
17	call	to communicate or utter	520
		"Call supplier and place order."	
	page	"Page doctor when interviewee arrives."	
	telephone	"Telephones doctor to cancel interview."	
7	check	to inspect for satisfactory condition . . .	1389
		"Check schedule for shift's processing."	
	examine	"Examined insured's file to determine amount paid."	
	inspect	"Inspect each check for signature."	
57	code	any system of symbols for meaningful communication	83
		"Code information for keypunch."	
36	collect	to bring together into a band or group . . .	278
		"Collect copies of transactions at points of origin."	
	accumulate	"Accumulate data from memos."	
	assemble	"Assemble purchase orders for week."	
	batch	"Batches currency into bundles."	
	gather	"Gathered reports."	
42	compare	to examine for the purpose of discovering resemblances or differences	305
		"Compare balance with checkbook balance."	
	balance	"Balance register by re-adding."	
	match	"Match sums received against checks."	
	reconcile	"Reconcile ledger monthly."	
34	compile	to assemble and put in logical order	247
		"Compile data on collections."	
	list	"Lists checks and cash on deposit slip."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
	make up	"Make up a folder for employee."	
	set up	"Sets up a folder for applicant."	
33	complete	to fill, make entire, perfect	328
		"Completes card with correct information."	
	fill in/out	"Fills in/out description and amount."	
18	compute	to determine by mathematical means or arrive at an answer	503
		"Computes benefits if loss was payable."	
	calculate	"Calculate premium using adding machine."	
	convert	"Converts data to charts and graphs."	
	count	"Count cash twice a week."	
	divide	"Divides list among three workers."	
	extend	"Uses calculator to extend orders."	
	figure	"Figure up correct premium."	
	multiply	"Multiply hours times hourly rate."	
	subtract	"Subtract actual from standard cost to get variance."	
27	correct	to change in order to set right	404
		"Correct cards containing errors."	
	change	"Change file records to reflect new information."	
	debug	"Debug machine."	
	fix	"Inspect and fix machine if possible."	
	update	"Update records to make current."	
	upgrade	"Upgrade old cards."	
3	deliver	to give, transfer, yield possession of	1923
		"Deliver completed report to supervisor."	
	give	"Give to typist for copying."	
	hand to	"Hands correspondence to manager."	
	present	"Presents to agent handling account."	
	submit	"Submits program for testing."	
54	destroy	to put out of existence	132
		"Destroy order notices as executed."	
	discard	"Discard old files."	

6

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
	purge	"Purges confidential materials in burn barrel."	
	throw away	"Throw carbons away in wastebasket."	
13	determine	to settle a question or come to a decision	632
		"Determine number of copies required."	
	choose	"Chooses supplies from shelf."	
	decide	"Decide on matter being discussed."	
	evaluate	"Evaluates run for source of error."	
	grade	"Grade test using punched master."	
	identify	"Identify the need for information."	
	score	"Scores tests."	
	select	"Select proper form from desk."	
	test	"Tests program on computer."	
		"Administers typing tests."	
25	direct	to assist by giving advice, instruction, and supervision	408
		"Direct patient to receptionist's desk."	
	assist	"Assist applicant as needed."	
	describe	"Describes how to type contracts."	
	explain	"Explains correct correspondence format."	
	help	"Help artist arrive at best data portrayal."	
	instruct	"Instructs applicants to wait."	
	oversee	"Oversee filling out of application."	
	provide	"Provide information."	
	show	"Shows applicants to test room."	
	supervise	"Supervise move from office to office."	
	supply	"Supply information necessary."	
	take	"Take person to supervisor."	
	teach	"Teach new employee how to keep records."	
	witness	"Witness signature."	
56	discuss	to discourse about, examine and pass on	96
		"Discuss special instructions with customer."	
	confer	"Confer with supervisor about matter."	
	consult	"Consult with artist while work progresses."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
	interview	"Interview patient in patient's room."	
	talk with	"Talk with supervisor about plans."	
40	distribute	to deal out, to dispense	245
		"Distributes mail delivered to office."	
	give to	"Give out test forms to students."	
	hand	"Hands out test booklets."	
25	duplicate	to make a copy of	408
		"Duplicates desired number of copies."	
	copy	"Copy code on item to be filed."	
	mimeograph	"Mimeographs 250 copies of sermon."	
	photocopy	"Photocopy original purchase order."	
	Xerox	"Xerox the letter."	
5	file	to arrange in particular order for preservation and reference	1640
		"File card alphabetically by name."	
52	greet	to meet and give salutations	142
		"Greet visitors."	
	welcome	"Welcome arriving guests at meeting."	
38	hold	an order or indication that some action is to be delayed	254
		"Hold cards for verification."	
	keep	"Keeps one pile for office file."	
	maintain	"Maintain control sheet for office keys."	
	store	"Store paid instrument for further processing."	
15	inform	to make known or give instruction	547
		"Informs supervisor of new procedure."	
	advise	"Advises caller that callee is out."	
	alert	"Alert room service dates guests will arrive."	
	notify	"Notify ex-patient his payment is past due."	
	quote	"Quotes coverage, premium for first year, and escrow."	
	reiterate	"Reiterate that it is patient's responsibility to pay."	
	relate	"Relate to customer desired information."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
	remind	"Remind supervisor of appointments."	
	repeat	"Repeat process until number of needed copies are typed."	
	signal	"Signal supervisor his call is ready."	
	suggest	"Suggested revisions in the plan."	
	tell	"Tell supervisor when evidence of coverage is not received."	
12	insert	to put into or inject	788
		"Insert paper into computer for printout."	
	put in	"Put letter in basket."	
	stuff	"Stuffed envelopes."	
49	issue	to give out or make available	153
		"Issues keys to incoming personnel."	
	assign	"Assigns a number to the application."	
	disburse	"Disburses cash for reimbursement."	
	pay	"Pays out money from window cash."	
20	locate	to determine the place of, to seek out and find	485
		"Locates information in file."	
	find	"Find papers needed from the files."	
	go thru	"Goes through pending pouch."	
	look for/up	"Look up information in computer book."	
	search	"Worker searches for order in her files."	
	trace	"Trace shipment by calling or writing customer, supplier, or carrier."	
29	mail	to send postal matter by mail	484
		"Mails invoice to customer."	
45	note	to take due or special notice of	193
		"Notes procedure and types rough draft."	
	annotate	"Annotates travel calendar with necessary information."	
	make note of	"Makes note of the changes."	
	notate	"Make notations in log book of voided order."	
8	obtain	to gain or attain possession of	1345
		"Obtains necessary signatures on forms."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
	get	"Gets information from manager."	
	pick up	"Picked up materials at other office."	
	secure	"Secures permission of underwriter to process change."	
44	open	to make available for use	199
		"Open external mail for supervisor."	
35	operate	to cause to function; to bring about; effect.	299
		"Operates a sequential stamping machine."	
	activate	"Activated MTST to correct spot on tape."	
	deactivate	"Deactivates machine when finished."	
	feed	"Feed tape into keypunch."	
	load	"Loads input cards into the card reader."	
	move	"Moves lever to operating position."	
	start	"Start the machine."	
	put in	"Put mail into machine for stamping."	
	thread	"Thread tape on machine."	
	turn off/on	"Turn off/on machine."	
47	package	to enclose in a package or protective covering	159
		"Package documents for mailing."	
	bind	"Bind on spiral binder."	
	tie	"Tie each group of envelopes with string."	
	wrap	"Film and packages wrapped for mailing."	
6	place	to cause to rest or lie, to dispose, to put into	1504
		"Places mail order on spindle on desk."	
	put	"Puts copy of suspense voucher in insured's folder."	
24	proofread	to read and mark corrections in matter . . .	422
		"Proofread letter and sign it."	
14	pull	to remove or cause to be removed from a place (file)	574
		"Pull report cards of withdrawals."	
	extract	"Extracts copy of policy."	
	take from	"Investment book is taken from file."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
43	punch	to record data by perforating a card or tape	234
		"Punch cards using information from sheets."	
	keypunch	"Keypunch grades into individual class cards."	
1	receive	to take in, to admit, to accept	2933
		"Receives an order from a salesman."	
	take	"Takes requisition for funds."	
10	record	to set down in writing	958
		"Records prices on sheet of paper."	
	enter	"Enters invoice payment date when payment arrives."	
	journalize	"Journalizes the day's work."	
	log	"Logs travel request in travel log."	
	post	[to the ledger only] "Post salaries paid to personnel."	
57	refer	to send or direct for information	270
		"Refer phone call to supervisor."	
	consult	"Consult reference book for codes."	
	look at/on/up	"Look on precomputed chart for amount of discount."	
	relay	"Relay telephone calls."	
	turn over	"Turn call over to supervisor."	
22	remove	to change or shift location, take off or away	444
		"Remove completed stack of cards from machine."	
	delete	"Delete record by taking out 3x5 cards."	
	erase	"Erases former class and puts in new one on office class cards."	
	take off	"Takes off belt and index strip when machine stops."	
21	request	the act of asking for something	468
		"Request identification on receipt of check."	
	ask	"Ask for immediate payment."	
	inquire	"Inquire as to nature of problem."	
23	return	to go back or send back	424
		"Return tickets to computer room."	
	give back	"Give completed material back to supervisor."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
32	run tape	to operate a tape machine, e.g., adding machine	330
		"Run tape on inventory sheet."	
55	run through	a term used for putting data into a computer and operating	121
		"Run through the computer the card deck received from keypunch."	
30	scan	to make an intensive examination of, to check	378
		"Scanned rough draft to see that all information had been added."	
	read	"Read policy to determine if loss was covered."	
	review	"Review notebook to be sure nothing has been omitted."	
9	send	to cause something to be conveyed or transmitted by an agent to a destination	996
		"Sends a note to the company asking for rest of shipment."	
	forward	"Forwarded suspense vouchers to cashier."	
	route	"Route memo to typist to make changes in names."	
	transmit	"Transmit call through Washington."	
11	sort	to arrange according to characteristics	945
		"Sort cards by record room number."	
	break down	"Breaks down total of each project into specific items--desks, drafting tables, cabinets."	
	index	"Index folders into coding, correspondence, and personal."	
	separate	"Separates checks and cash."	
28	stamp	to impress or mark with a device	387
		"Stamps utility bill with proper stamp."	
46	take dictation	to write dictated material, usually in shorthand	170
		"Takes dictation in shorthand."	
50	total	a result of addition, a summation of factors	152
		"Totals receipts for regular accounts."	

Rank N=57	Verb and Synonyms	Definition and Examples	Frequency
51	transcribe	to copy dictated materials in common, legible language	147
		"Transcribes memo from dictation."	
40	transfer	to pass from one to another	245
		"Transfer totals to report form."	
	connect	"Connects line with broker."	
2	typewrite	the act of using a typewriter [type]	1925
		"Types a rough draft of the dictation."	
39	verify	to confirm, to prove to be true	252
		"Verifies accuracy of data on old order by checking information."	
	confirm	"Confirms reservations for manager's trip."	
4	write	to form or trace symbols on paper	1677
		"Write total in left-hand corner."	
	compose	"Composes message to accompany application."	
	draw	"Draw a red line across form."	
	handwrite	"Handwrite in current date."	
	initial	"Initial left-hand corner of check."	
	label	"Label stacks of letters by zip code."	
	make up	"Makes up a telegram listing extensions."	
	mark	"Mark this amount on suspense voucher."	
	sign	"Sign form letters for agent."	
	sketch	"Sketches the art work."	
	tag	"Tags stock as it is received."	
	MISCELLANEOUS		256
	clean	"Clean Xerox machine."	
	dust	"Dust files."	
	tidy	"Tidy conference room after meeting."	
	close	"Close tellers window."	
	lock	"Lock money in box."	
	cut	"Cuts off edges to fit in file."	
	deposit	"Deposit money in bank."	
	perform	"Performs special tasks as commanded by supervisor."	
	carry out	"Carry out duties utilizing information received."	

Rank N=57	Verbs and Synonyms	Definition and Examples	Frequency
	photograph	"Photographs checks on Recordak."	
	refuse	"Refuses claim."	
	reject	"Rejects offer of salesman."	
	turn away	"Turn salesman away gracefully."	
	travel	"Travels either in state owned vehicle or personal car."	
	go	"Goes to location as scheduled by supervisor."	
	transport	"Transport to office [mail]."	
	wire	"Wires board before proceeding."	
	weigh	"Weigh the letter on weighing machine."	

APPENDIX E

NOBELS Punched Card Information Code (Abbreviated)

ZERO CARD

Location on NOBELS Form	Card Column	Code	Code Description
P. 1, upper rt. corner	1	1-7	GEOGRAPHICAL LOCATION 1 - U.C.L.A. (Main Data), 2 - U. of Minnesota, 3 - U. of Georgia (Main Data), 4 - State U. of N.Y. at Albany, 5 - Wayne State U., 6 - U.C.L.A. (Pilot Data), 7 - U. of Georgia (Pilot Data)
	2-4	001-350	CASE (INTERVIEW) NUMBER
	5-6	00	MASTER CARD NUMBER
P. 1, Q. 2	7-8	01-99	STANDARD INDUSTRIAL CLASSIFICATION (See code list of SICs)
P. 1, Q. 3	9	1-2	SIZE OF COMPANY (SIC) (1) +100 employees, (2) -100 employees
P. 1, Q. 4	10	1-2	STANDARD METROPOLITAN STATISTICAL AREA (SMSA) (1) +100,000 population, (2) - 100,000 population
P. 3, Q. 10-11	11-12	1-0	CRITICAL INCIDENT CLASSIFICATION - INTERACTION 1 - Cognitive skills, 2 - Checking skills, 3 - Communication skills, 4 - Psychomotor skills, 5 - Work Habits, 6 - Attitudes, Affective, Within, 7 - Social Skills or Graces, 8 - Interpretation of the System, 9 - Instructs, Describes, Modifies, Creates, 0 - No Incident Given
P. 4, Q. 15	13-14	01-11	JOB TITLE OF EMPLOYEE BY AMS - AMER. MGMT. SOC. - CLASSIFICATION 01 - Mail Clerk, Messenger, 02 - File Clerk, 03 - General Clerk, 04 - Public Contacts Operator, 05 - Typist-Clerk, 06 - Office Machine Operator, 07 - Data Processing Equipment and Operations, 08 - Accounting Clerk, 09 - Telephone Switchboard Operator, Receptionist, 10 - Stenographer and Secretary, 11 - Materials Support Occupations, Transportation, Storing, and Recording.
P. 2, Q. 6, L. 2	15	1-9	DEPARTMENT IN WHICH TASK IS PERFORMED 1 - Accounting, Comptrollership, Credit, 2 - Data Processing, 3 - Personnel, 4 - Production, 5 - Purchasing, 6 - Receiving and Shipping, 7 - Sales, Marketing, and Advertising, 8 - Services, 9 - General Office or Indeterminate

Location on NOBELS Form	Card Column	Code	Code Description
P. 4, Q. 21	16	1-2	SEX OF EMPLOYEE 1 - Male, 2 - Female
P. 4, Q. 22	17-18	16-24	AGE OF EMPLOYEE Actual age of employee

ONE - SEVEN CARD

Location on NOBELS Form	Card Column	Code	Code Description
P. 6, 1st 4 boxes upper rt. corner	1-4	(See codes and explanation for same four digits on Zero Card)	
P. 6, 5th box upper rt. corner	5-6	01-07	TASK DATA FOR PERFORMANCE GOAL WRITING SHEET 0-7 Page 6s can be written for each interview dependent on number of basic tasks the interviewer writes up.
P. 3, Q. 8-9	7-8 Any two of these numbers in combination	1-0	CRITICAL INCIDENT CLASSIFICATION--JOB PERFORMANCE (See listing for Zero Card)
P. 6s, 1st 2 of 4 digits opposite "Task"	9-10		FUNCTION OF EACH PAGE 6 BASIC TASK - WHAT
		01-19	Accounting
		20-29	Electronic Data Processing
		30-39	Personnel
		40-49	Production
		50-59	Purchasing
		60-69	Shipping and Receiving
		70-79	Sales
		80-99	Services
P. 6s, 2nd 2 digits opposite "Task"	11-12		FUNCTION OF EACH PAGE 6 BASIC TASK - OBJECT - WHY
		01-19	Source Documents
		20-29	Negotiable Instruments and Investments
		30-39	Correspondence and Mail
		40-49	Electronic Data Processing
		50-59	Files
		60-79	Reports, Tabulations, and Charts
		80-89	Inventory (Intransit, Warehouse)
		90-99	People and Ideas
P. 6s Series of 3 digits each beneath "Steps & Contingencies or Alternatives"	13-69	001-999	VERBS (See Coded Verb Classification)

CARD EIGHT

Location on NOBELS Form	Card Column	Code	Code Description
ALL PAGE 2			
Upper rt. corner	1-4	(See codes and explanations for same 4 digits on Zero Card)	
	5-6	08	MASTER CARD NUMBER
Opposite box 1, 1st 2 digits	7-8	(See codes and explanation One-Seven Card for columns 9-10 - WHAT)	
Opposite box 1, 2nd 2 digits	9-10	(See codes and explanation One-Seven Card for Columns 11-12 - WHY)	
Boxes A-E for box 1	11	1-3	A) Consequences of Not Performing Task Correctly: 1 - Great, 2 - Moderate, 3 - Little
	12	1-2	B) Changing Task: 1 - Yes, 2 - No
	13	1-3	C) Frequency of Performing Task: 1 - High, 2 - Medium, 3 - Low
	14-15	01-99	D) Percent figure of employee's total time spent on task
	16	1-9	E) Most Difficult Task to Least Difficult Task--as many numbers as tasks written
Opposite box 2, 1st 2 digits	17-18	(WHAT--This is a repeat for box 2 of the same kind of material as in columns 7-8 of this card)	
Opposite box 2, 2nd 2 digits	19-20	(WHY - OBJECT--This is a repeat for box 2 of the same kind of materials as in columns 9-10 of this card)	
In boxes A-E, box 2	21-26	(A-E--This is a repeat for box 2 of the same kind material as in column 11-16 of this card)	

Continue in this manner (columns 7-16 and 17-26) for each task evaluation listed for card columns 27-36, 37-46, 47-56, 57-66, 67-76.

CARD NINE

Location on NOBELS Form	Card Column	Code	Code Description
ALL PAGE 5			
Upper rt. corner	1-4	(See codes and explanation for same 4 digist on Zero Card)	
	5-6	09	MASTER CARD NUMBER
	7-76	(See codes and explanation for Card Eight. Card Nine is a replica of Card Eight differing only in that Card Eight records answers of employees and Card Nine the answers of supervisors to the same question.)	